



# TRAK 101™ / TRAK 102™



## USER'S GUIDE

Key Tronic®  
MADE IN THE U.S.A.

# TRAK101™/TRAK102™ Registration Card

To help us better understand your needs, please complete and return this registration card. By returning this card, you will be notified of future product upgrades.

---

Name: \_\_\_\_\_ Serial # (S/N): \_\_\_\_\_  
Company: \_\_\_\_\_ Dealer Purchased From: \_\_\_\_\_  
Title: \_\_\_\_\_  
Address: \_\_\_\_\_ Dealer address: \_\_\_\_\_  
City, State, Zip: \_\_\_\_\_  
Phone: ( ) \_\_\_\_\_  
Purchase Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Dealer Phone: ( ) \_\_\_\_\_  
Mo Day Year Price Paid: \_\_\_\_\_  
Signature: \_\_\_\_\_

---

This product was purchased to be used where?  
 Business  Education  Home

If you checked BUSINESS above, what is the estimated annual sales of your company:  
 Under \$1 Million  \$10-50 Million  
 \$1-10 Million  Over \$50 Million

Check the TWO (2) most important factors influencing your selection of this keyboard:  
 Recommendation by Dealer  Trackball  
 Recommendation by Friend  Key Feel  
 Key Tronic Name  Price  
 Magazine Review  Key Layout  
 PS/2 Compatibility  Space  
 Product Features  Savings  
 Other: \_\_\_\_\_  
*(Specify)*

Check the TWO (2) keyboard features most important to you:  
 Pleasing Key Feel  Appearance  
 Cursor Pad Layout  Key Sound  
 LED On/Off Indicators  Key Layout  
 Numeric Pad Layout  Function Key Location  
 Sturdiness  
 Other: \_\_\_\_\_  
*(Specify)*

How did you first learn about this product?  
 Magazine Ad  Trade Show  
 Magazine Review  Dealer  
 Personal Recommendation  Mail Order Ad  
 Other: \_\_\_\_\_  
*(Specify)*

If you answered MAGAZINE AD, MAIL ORDER AD or TRADE SHOW, which magazine, mail order house or trade show?  
\_\_\_\_\_  
*(Specify)*

What TWO (2) software applications do you use most often with your computer?  
 Word Processing  Statistical  
 Spreadsheet  CAD  
 Accounting  Graphics  
 Desktop Publishing  Programming  
 Communications  Database  
 Software Development  Data Entry  
 Other: \_\_\_\_\_  
*(Specify)*

With what model computer will your keyboard be used?  
\_\_\_\_\_

Will this product replace an existing keyboard?  
 Yes  No

Will this product replace an existing pointing device?  
 Yes  No

If yes, which type (ie. mouse, touchpad, trackball...)  
\_\_\_\_\_

Which computer magazine (if any) do you read most?  
\_\_\_\_\_

Did you specify the purchase of this keyboard?  
 Yes  No

If you answered NO, what is the title of the person who specified the purchase of this keyboard?  
\_\_\_\_\_



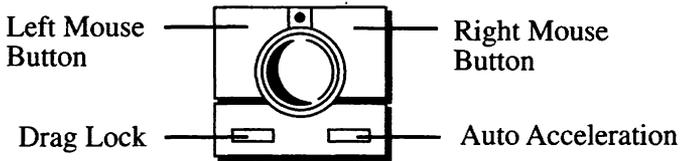
# TRAK101™ and TRAK102™ Quick Start Card

This card provides users with the basic information needed to quickly begin using the unique features of the TRAK101 or TRAK102 keyboards. For detailed information, refer to Sections 2, 3 and 4 of the TRAK101/TRAK102 User's Guide.

## Trackball Buttons and Keyboard Mouse Keys

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The trackball on your TRAK101 or TRAK102 keyboard is supported by four trackball buttons and six keyboard mouse keys denoted by blue mouse legends on the front face of the keycaps. The default settings for the trackball buttons are shown below:



To activate the keyboard mouse keys, press the Mouse ON/OFF key located in the upper right hand corner. An LED in the Mouse ON/OFF key indicates when in mouse mode. Press the ON/OFF key to return to standard keyboard functions.

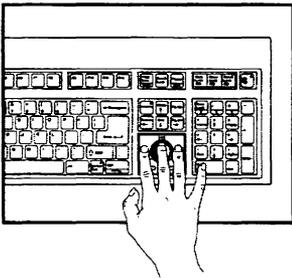
## Software Installation

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Use the Install Program supplied on the TRAK101 software diskette to copy the trackball driver onto your computer's hard disk. If you already have a Microsoft mouse driver loaded for use with Windows or other applications, you will not need to load the TRAK101 trackball driver.

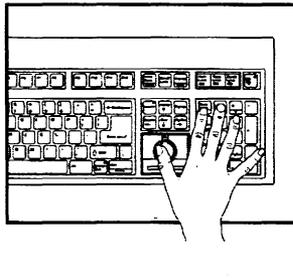
## Trackball Usage

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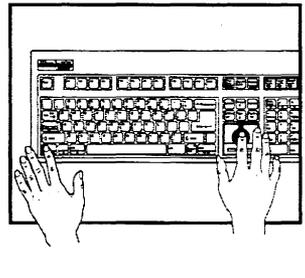
### One Handed Usage

Use your index or middle finger to move the trackball. Use the buttons on the trackball module.



### One Handed Usage

Use your thumb to move the trackball. Numeric pad keys are assigned left, right, and drag lock mouse functions.



### Two Handed Usage

Move the trackball with your right hand. Ctrl-Alt key section assigned left, right, and drag lock mouse functions.

## **Notices**

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### **TRAK101™ and TRAK102™ User's Guide**

KTC Part Number: 53086-1

Comments or correspondence regarding the TRAK101 and TRAK102 User's Guide should be directed to:

Key Tronic Corp.                      P.O. Box 14687  
Attn: Marketing Dept.              Spokane, WA 99214-0687

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This equipment generates and uses radio frequency energy and if not installed properly, that is in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type-tested and found to comply with the limits for a Class B computing device in accordance with the specifications in CFR 47, Part 15, Subpart B of the FCC Rules, which are designed to provide reasonable protection against interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.
- Move the computer away from the receiver.
- Plug the computer and receiver into a different outlet so that the computer and receiver are on different branch circuits.
- Move the cables connected to the computer to minimize the interference.

**FCC Notice**

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If necessary the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful:

"How to Identify and Resolve Radio-TV Interference Problems."

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 004-000-00345-4.

<p><b>Warning</b> Any changes or modifications not expressly approved by the party responsible for compliance, could void the user's authority to operate this equipment.</p>
---

In order to satisfy the FCC Class "B" limits, this equipment is supplied with a shielded cable along with an RF suppression device.

**FCC Notice**

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Agreement**

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## Section 1

## INTRODUCTION

Section 1 provides a description and a list of features for the Key Tronic® TRAK101™ keyboard.

### *Keyboard Description*

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The TRAK101 keyboard is a 101-key trackball keyboard compatible with IBM PCs, XTs, and ATs, as well as true IBM compatible computers. An optional PS/2 Cable Kit provides compatibility with IBM Personal System/2 Models.

The TRAK102 keyboard is the international version of this keyboard and is available with French, German, Swedish and United Kingdom language options.

**Note:** If you purchased the TRAK102 keyboard all of the TRAK101 information in this User's Guide applies. All TRAK102 specific information can be found in Appendix B:

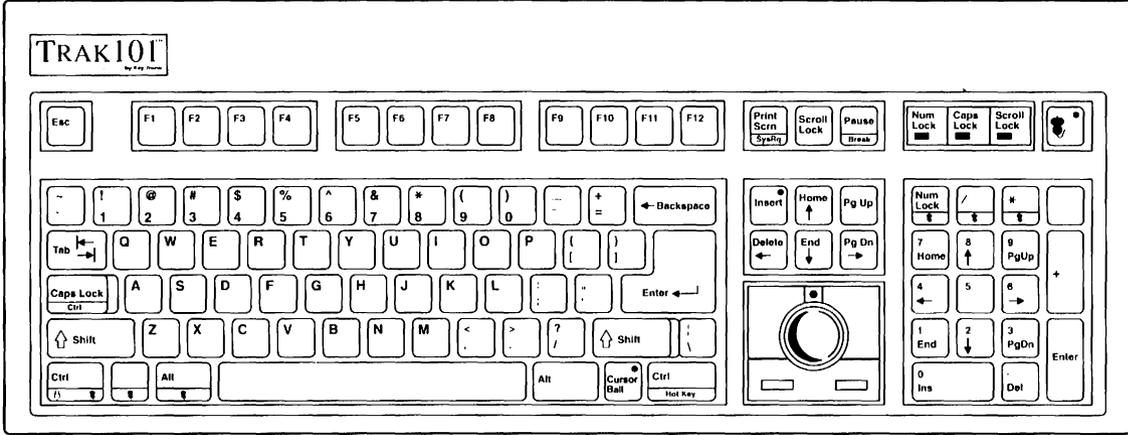
- International keyboard layouts
- Keyboard driver installation
- Using the keyboard macro

The keyboard features an integrated, 4-button trackball for point and click convenience. Desktop space savings and increased productivity are just a few of the many benefits you will gain by using this keyboard. A 200 cpi resolution trackball and an auto-acceleration feature assures pin-point accuracy and quick cursor movement across any size monitor.

The keyboard also features two sets of keyboard "mouse keys" that allow standard keyboard keys to conveniently function as mouse buttons. An additional key serves as a dedicated "drag lock" key. A drag lock LED is built into the trackball module for easy detection of "Click" and "Drag Lock" status.

An illustration of the TRAK101 keyboard is shown on the next page.

TRAK101 Keyboard



Keyboard  
Description

***Keyboard Features***

---

**Interchangeable Caps Lock and Ctrl Keys**

The functions of the Caps Lock and Ctrl keys can be switched to suit user preference or to match the requirements of specific application programs.

**Period - Comma Lock**

This feature "locks in" the Period and Comma keys allowing you to obtain these symbols when typing uppercase letters with either shift key. The Period - Comma lock eliminates inadvertent "typos" when entering successive uppercase letters that contain either periods or commas.

**User Modifiable Key Feel**

Custom Key Feel Kits that enable you to modify the key feel of your keyboard are available through Key Tronic's Accessory Sales Department. This keyboard uses a 2.0 ounce rubber dome. If you prefer a lighter feel, order a 1.0 ounce rubber dome kit. For a firmer feel, order a 2.5 or 3.0 ounce Custom Key Feel Kit.

**Key Tronic Reliability**

The Keyboard is designed for reliability and durability using keyswitches that are rated at 100 million key-strokes. As a result, this keyboard is backed by a three year limited warranty.

***Trackball Features***

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**Four-Button Trackball**

The four-button integrated trackball extends the functionality of a standard two button mouse by adding buttons for "drag lock" and auto acceleration.

**Keyboard Mouse Keys**

Six keyboard keys can be assigned as standard left, right, and drag lock mouse functions. These functions can be assigned to either the numeric pad mouse keys or to the Left Ctrl and Alt mouse keys - with a single key press.

**Flexible Operation**

The assignment of Click functions to the keyboard mouse keys permits one- or two-handed operation, and finger or thumb trackball operation.

**Drag Lock LED**

An LED is located in the trackball module for easy detection of Click and Drag Lock status.

**Auto Acceleration**

This feature permits full screen travel with minimal trackball rotation. The faster you rotate the trackball, the faster the cursor moves. The ability to quickly send the cursor to another part of the screen is especially convenient when using a large screen monitor.

**Mouse and Cursor Modes**

In addition to operating in standard mouse mode, the trackball can also operate in cursor mode. In this mode, rolling the trackball sends up, down, left, and right cursor keys -- ideal for quickly moving around in spreadsheets or word processing documents.

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## Section 2

## INSTALLATION

Section 2 provides a checklist of items included with the keyboard and gives step-by-step installation instructions for connecting it to your computer. This section also explains how to install the trackball and keyboard driver software.

### *Preliminary Steps*

---

Ensure that your keyboard box contains the following:

- The TRAK101 or TRAK102 Keyboard
- The TRAK101/TRAK102 User's Guide and Registration Card
- 9-25 Pin Adapter Card
- PS/2 Cable Kit Request Card
- TRAK101/102 Software Diskette
- KB102 Keyboard Driver Disk (TRAK102 only)

Notify your dealer immediately if any items are missing or damaged. See Appendix C for detailed Customer Support Information.

Please complete the registration card and return it to Key Tronic. This registration card enables Key Tronic to keep you informed of product upgrades and enhancements.

<p><b>Note:</b> The following installation instructions apply to all models except PS/2. If you are connecting the keyboard to a PS/2 type port, you need the PS/2 Cable Kit. This cable kit is available by returning the Cable Request Card included in this User's Guide.</p>
--

## ***Keyboard Installation***

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The keyboard has a custom split cable that supports both keyboard and trackball data. The round 5-pin DIN connector attaches to the keyboard port. The second connector is a DB-9 female connector that connects to the serial port on your computer.

If your computer has a 25-pin serial port, you will need a 9-25 pin adapter. This adapter is available through Key Tronic Accessory Sales by returning the Request Card included in the back of this User's Guide.

Follow these steps to install the keyboard.

- Step 1.** Turn OFF your computer.
- Step 2.** Set the mode switch if needed.
- Step 3.** Insert the keyboard cable connector into the keyboard port on your computer.
- Step 4.** Insert the 9-pin connector into the serial port (COM 1 or COM 2) on the back panel of your computer.
- Step 5.** Turn your system unit ON.

## *Mode Switches*

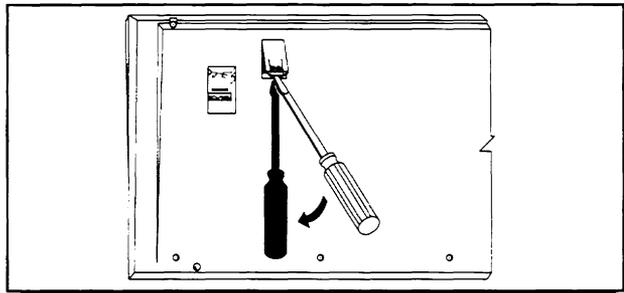
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The keyboard contains a mode switch that allows you to set the keyboard mode of operation to match that of your computer system. Other switch settings can be used to customize the keyboard and trackball operation.

In most cases, you will not need to change the mode switches. The keyboard is preset to work with IBM enhanced, PS/2 Models and true compatibles that use an enhanced keyboard.

Standard PC or XT models that use an 83 or 84 key keyboard require a mode switch change.

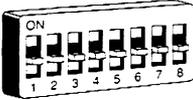
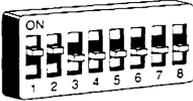
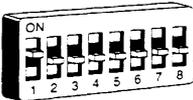
To access the mode switch, remove the plastic mode switch cover on the bottom of the keyboard.



The mode switch consists of eight ON/OFF toggles that are factory preset to OFF, compatible with the enhanced XT, AT, and PS/2 Model computers. The TRAK101 can automatically determine (auto discriminate), whether it is connected to an enhanced XT or AT.

If you have a standard IBM PC, XT, or AT (83 or 84 key keyboard), set the switches according to the following table.

## Mode Switches

	Enhanced XT/AT and PS/2 Models	Switch 1	OFF
		Switch 2	OFF
	Standard AT	Switch 1	ON
		Switch 2	ON
	Standard PC & XT	Switch 1	ON
		Switch 2	OFF

To change a mode switch to ON, simply slide the appropriate switch towards the side marked "ON". To change the mode switch back to OFF, slide the switch back towards the "number", or OFF side.

The mode switches are used to customize trackball and keyboard operation as summarized below.

Switch	Function
1-2	Keyboard mode operation (see above)
3	Turn ON if computer beeps when using Page Control or Cursor Control keys
4	Not used
5	Swaps the Caps Lock and Ctrl keys
6	Swaps left and right mouse buttons on left set of Keyboard Mouse Keys
7	Inhibits left set Keyboard Mouse Keys
8	Inhibits right set Keyboard Mouse Keys

Switches 5-8 are discussed in greater detail later in this User's Guide.

**Trackball Software  
Installation**

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Before the trackball can function, a software trackball driver must be loaded. The trackball driver allows the trackball and computer to communicate. The TRAK101/102 Software Diskette contains an Install program that copies the driver software onto your hard disk. The TRAK102 keyboard uses the same driver as the TRAK101.

**Note:** The TRAK101 driver software is Microsoft two-button mouse compatible. If you already have a Microsoft mouse driver loaded for use with Windows or other applications, you will not need to load the TRAK101 trackball driver.

Windows will not recognize the keyboard if it is in cursor ball mode during loading. Make sure the keyboard is in mouse mode when loading MS Windows.

Follow these steps to run the TRAK101 Install program.

**Step 1.** Place a back-up copy of the Trak101 Software Diskette into drive A.

**Step 2.** From the DOS prompt, type:

A> INSTALL <RETURN>

The Install program copies the driver software, utilities, games, and the Trackball Assistant program according to your input during the Install process. Install will modify your AUTOEXEC.BAT or CONFIG.SYS file so that the trackball driver is loaded each time you restart your system.

**Step 3.** Restart your computer.

If you do not want Install to copy the drivers into your system files, you may manually load the trackball driver by entering TRAK101 or TRAK102 from the DOS command line. However, you will need to reload the driver every time you restart your computer.

In addition to the driver software, the TRAK101/102 Software Diskette contains a number of other useful files:

- **Install Program and Mouse Drivers**
  - TRAK101.COM ..... Standard mouse driver
  - TRAK101.SYS ..... Alternate mouse driver
  - INSTALL.EXE ..... Software installation program
  
- **Trackball Assistant Program**
  - ASSIST.EXE ..... Installation validation,  
trackball tutorial, and help
  - ASSIST.HLP ..... Help file for ASSIST
  
- **TRAK101 Utilities**
  - ADJUST.EXE ..... Adjusts trackball speed
  - SETSPEED.EXE ..... Sets trackball ballistic gain
  - DEFAULT.PRO ..... Defaults for SETSPEED
  - README.DOC ..... Read for extra instructions
  
- **TRAK101 Games**
  - PLAYER.EXE ..... A piano simulation game
  - PYRAMID.EXE ..... A solitaire game

These programs can also be copied onto your hard disk with the Install program.

***Trackball Assistant***

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After completing the software set-up with the Install program, you can confirm the installation procedure with the Trackball Assistant Program.

From the DOS prompt, type:

A> ASSIST <RETURN>

When the Trackball Assistant is displayed, move the trackball and press the buttons as indicated.

If you get no response on the screen when moving the trackball or clicking the trackball buttons, press F1 to obtain detailed assistance. Follow the instructions that are listed on the screen and use them as a check list for pin-pointing the problem.

If you need additional assistance, call our Product Support Specialists toll free at 1-800-262-6006, or in Canada, 1-800-348-6006. If calling from outside the continental U.S.A. or Canada, call Spokane, Washington U.S.A., (509) 927-5515.

A tutorial on basic trackball functions and TRAK101 operation is also contained in the Trackball Assistant. Use this program if you have not used a trackball before or if you want additional information on the TRAK101 keyboard.

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**Section 3****USING THE KEYBOARD**

Section 3 describes how to use many of the special productivity features built into the TRAK101 keyboard. Specifically, how to swap the Caps Lock and Control keys, activate Period-Comma Lock, and how to use the dual function cursor pad.

***The Hot Key***

---

The TRAK101's unique "Hot Key" (Right Ctrl), feature allows you to quickly make changes to the keyboard's layout to meet your specific requirements. When pressed by itself, the hot key functions as the standard Right Ctrl key. When pressed in combination with one of the hot key sequences, one of three keyboard changes will occur:

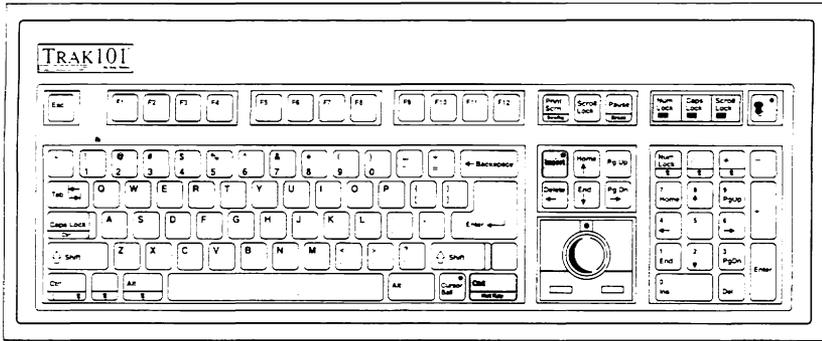
- Switch the Dual Function Cursor Pad
- Swap the Caps Lock and Ctrl keys
- Lock in the Period and Comma keys

The following pages discuss in detail each of these hot key functions.

The function keys, numeric pad keys, and typewriter area keys function like those on an enhanced 101 keyboard. For information on specific key functions, refer to the User Manual that came with your computer, a DOS Manual, or your application program manual.

<p><b>Note:</b> Trackball operation and the functions of the keyboard mouse keys are described in Section 4, Using The Trackball.</p>
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**Dual Function  
Cursor Pad**



### Switch Cursor Pad Functions

Hot Key Sequence: *Right Ctrl - Insert*

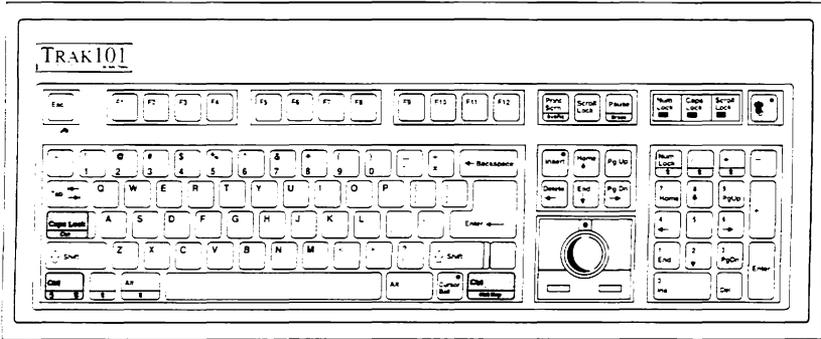
The TRAK101 keyboard features a dual function cursor control keypad with both page control and cursor arrows printed on the keycaps. The hot key combination, **Right Ctrl - Insert**, allows you to quickly switch between Page Control functions and Cursor Position functions (arrow keys).

An LED in the Insert key indicates whether the keyboard is in page control or cursor mode.

Upon power up, the page control functions are active and the LED is OFF. To activate cursor functions, press and hold down the Right Ctrl key and then press the Insert key. The LED will illuminate, indicating the cursor pad is now set to send cursors.

To return to the default setting, press the Right Ctrl - Insert hot key combination. The cursor keypad returns to page control mode with the LED OFF.

**Caps Lock And Ctrl  
Key Swap**



**Swap Caps Lock - Left Ctrl Key**

Hot Key Sequence: *Right Ctrl - Caps Lock or  
Right Ctrl - Left Ctrl*

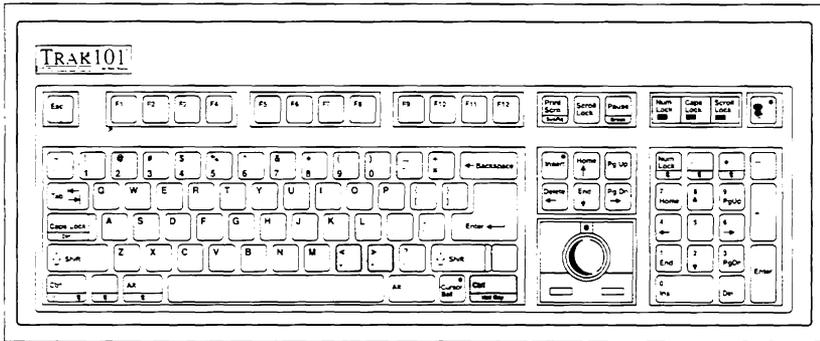
You may want to switch the functions of the Caps Lock and Ctrl keys to suit individual preferences. The hot key combination, **Right Ctrl - Caps Lock or Right Ctrl - Left Ctrl**, switches the functions of these keys.

The Caps Lock status indicator located in the LED panel will flash three times to indicate a successful switch. The Caps Lock key will perform the Ctrl function and the Ctrl key performs the Caps Lock function as indicated by the legends on the front of the keys.

To return to the default setting, press either hot key combination. The Caps Lock LED will flash three times to indicate the switch has occurred.

Hot key settings are not preserved through a power down or computer restart. The keyboard automatically reverts back to the default settings.

## **Period - Comma Lock**



### **Period - Comma Key Lock**

Hot Key Sequence: *Right Ctrl - Period or Comma*

The Period - Comma lock eliminates inadvertently typing greater than (>), less than (<) symbols when entering successive uppercase letters that contain periods or commas.

The TRAK101 is placed in Period - Comma Lock mode by pressing and holding down the Right Ctrl key and then pressing either of the Period or Comma keys.

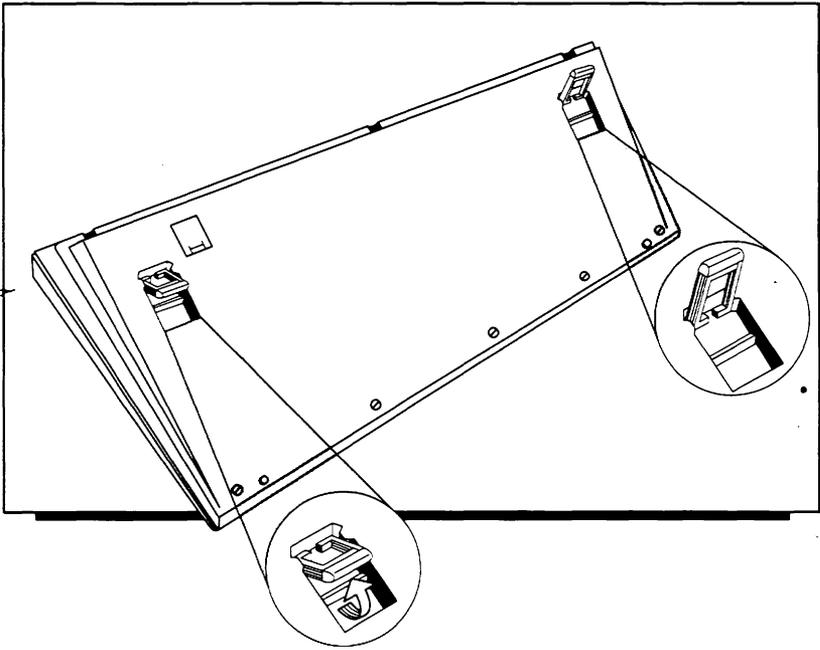
The Scroll Lock LED will flash three times, indicating a successful mode switch. When in this mode you have effectively "locked out" the greater than (>) and less than (<) symbols, allowing you to enter periods and commas while holding either Shift key.

To return to the default setting, press the Right Ctrl-Period or Comma hot key combination again. The Scroll Lock LED will flash three times to indicate the switch has occurred.

**Keyboard Height  
Adjustment**

---

The TRAK101 keyboard can be adjusted to two different positions, level and tilted, by positioning the adjustable legs on the bottom of the keyboard. To tilt the keyboard, simply lift the keyboard legs up, snapping them into their self-locking position as illustrated below.



---

## Section 4

## USING THE TRACKBALL

Section 4 describes how to use the trackball, the keyboard mouse keys, and the auto acceleration feature. Also explained is how to swap left and right button functions and adjust tracking speed and sensitivity from DOS and Windows. Mouse and cursor modes are also discussed.

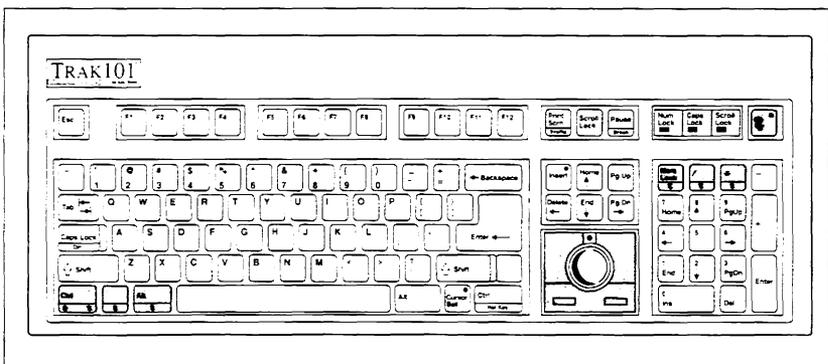
### *Trackball Button Functions*

---

The trackball on the TRAK101 is complimented with the following trackball buttons and keyboard keys as illustrated below.

- Four Trackball Buttons
  - Two mouse buttons
  - Drag lock button
  - Auto acceleration button
- Keyboard Mouse Keys
- Mouse ON/OFF Key
- Cursor Ball Key

Each of these is discussed in detail in the following pages.

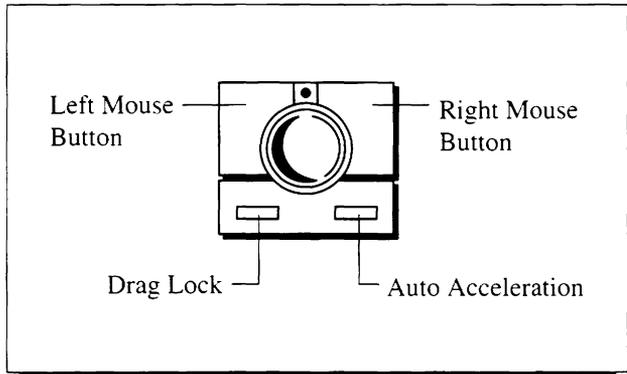


## ***Trackball Buttons***

---

The TRAK101 trackball module has four buttons and a built-in LED. The two, large trackball buttons function the same as the left and right buttons on a standard two button mouse.

The lower left button is the Drag Lock button. The lower right button is the auto acceleration button.



Drag lock is the same as pressing and holding down the left trackball button. The Drag Lock LED allows easy detection of Drag Lock status. Pressing the Drag Lock button causes the LED to illuminate and the trackball to operate in "lock" mode.

Drag Lock can be used to lock down pull down menus or highlight text. The LED remains ON until either the Drag Lock or left trackball button is pressed.

Clicking the left trackball button also causes the LED to flash.

***Auto Acceleration***

---

**Switch Auto Acceleration**

Hot Key Sequence: *Right Ctrl - Lower Right Trackball Button*

The auto acceleration button, when pressed in combination with the Hot Key, is used to quickly switch the cursor speed between fast, very responsive movement and slower, more precise movement.

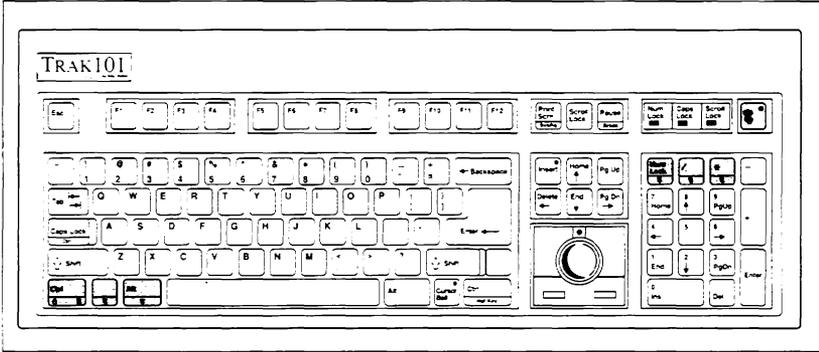
Auto acceleration permits full screen travel with minimum trackball rotation. When in auto acceleration, moving the trackball faster causes the cursor to move faster in proportion to the speed of the trackball.

To disable auto acceleration, press the Hot Key and the lower right trackball button. Rolling the trackball with auto acceleration disabled, provides greater control over cursor movement.

The default mode is with auto acceleration ON.

***Note:*** You can fine tune tracking speed and sensitivity through either the Windows Mouse Control Panel or with the ADJUST pop-up utility. Refer to "Trackball Controls" later in this section.

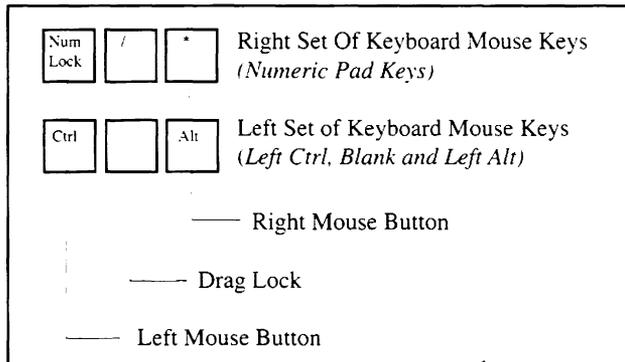
**Keyboard  
Mouse Keys**



The TRAK101 has six keyboard keys that can be assigned mouse button functions. These keys are labelled with the blue mouse icon on the front face of each keycap.

The Mouse ON/OFF Key in the upper right hand corner of the keyboard switches the keyboard mouse keys between normal keyboard operation and their mouse functions. An LED in the Mouse ON/OFF Key indicates when the mouse keys are in mouse mode.

When in mouse mode, the keyboard mouse keys function as shown in the following illustration:



***Keyboard  
Mouse Keys***

---

Normally, when pressing the Mouse ON/OFF key to place the keyboard mouse keys in mouse mode, both sets of mouse keys will be switched to mouse functions.

However, you can configure the keyboard mouse keys so that only one set will function as mouse keys by setting the mode switches as follows:

- Mode switch 7 ON - Inhibits left side mouse keys
- Mode switch 8 ON - Inhibits right side mouse keys

For left handed users, you can further customize the left set of keyboard mouse keys by swapping the left and right buttons. Set mode switch 6 to ON to make this change.

Refer to Section 2, Installation, for detailed information on setting mode switches.

## ***Cursor Ball Key***

---

The Cursor Ball key, located to the right of the space bar, switches the trackball between mouse and cursor modes. The default mode is mouse mode where the trackball and trackball buttons send standard mouse functions.

The trackball is placed into cursor mode by pressing the Cursor Ball key. The LED in the Cursor Ball key indicates when the trackball is in cursor mode. When in cursor mode, rolling the trackball sends the appropriate up, down, left, or right cursor keys depending on which direction you roll the ball.

In cursor mode, both left trackball buttons send the Enter key function and both right trackball buttons send the Escape key function.

**Note:** Because cursor mode allows the trackball to act like a very fast set of cursor keys, moving the trackball too fast may exceed your computers ability to process them.

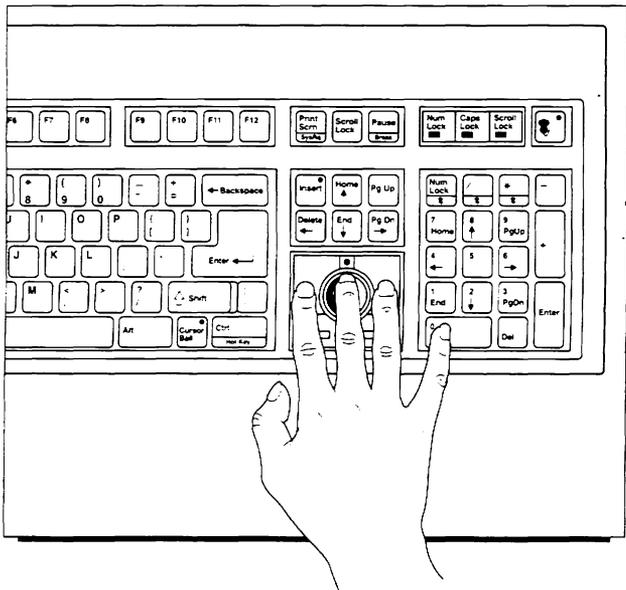
For best results, when using the trackball in cursor mode, make sure the Num Lock is off.

**Trackball Usage**

The combination of trackball buttons and corresponding keyboard mouse keys allow several methods of operation to suit user preference. One- or two-handed, and finger or thumb trackball control is supported.

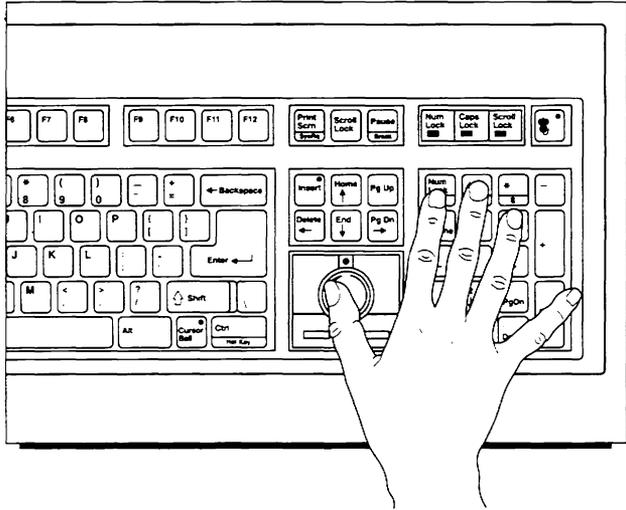
If you find one-handed usage most comfortable, (with thumb or primary fingers on the trackball), you may control the trackball in two ways.

The first method is to use your index or middle finger to move the trackball and use the buttons on the trackball module for left, right, and drag lock as illustrated below.

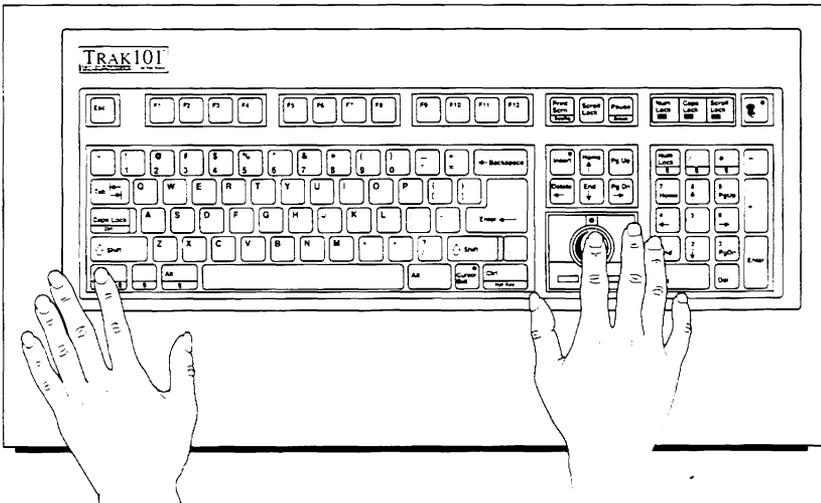


The second method is to use your thumb to move the trackball and use the keyboard mouse keys on the numeric keypad as left, right, and drag lock buttons as illustrated on the next page.

## Trackball Usage



Two-handed usage is supported by moving the trackball with your right hand and using the left set of keyboard mouse keys as left, right, and drag lock mouse buttons with your left hand as shown below.



***Trackball Controls***

---

The TRAK101 allows you to adjust the tracking and sensitivity levels of the trackball for different application programs. Sensitivity is the ratio of mouse movement to actual onscreen cursor movement.

After becoming proficient with the TRAK101, you may want to adjust the vertical or horizontal sensitivity. Different speed settings can also be selected that affect cursor movement depending on how quickly you move the trackball.

These adjustments can be made from Microsoft Windows, DOS, or a DOS text mode program by one of the following:

- Windows Mouse Control Panel
- Trackball Command Line Switches (DOS)
- Adjust Utility Program (DOS text based programs)

**Windows Mouse Control Panel**

From within the Windows Mouse Control Panel, you can adjust the double click speed, tracking speed and swap left and right buttons. These changes are made just as if you had a Microsoft two-button mouse.

**Command Line Switches**

Trackball command line options can be issued at any time from a DOS prompt.

The command line options for trackball adjustments are:

- /S<nnn> Sets both horizontal and vertical sensitivity
- /H<nnn> Sets horizontal sensitivity
- /V<nnn> Sets vertical sensitivity
- /D<nnn> Sets speed threshold at which the tracking rate doubles.

## Trackball Controls

---

Use a number from 0 - 100 in place of <nnn>. The default setting for each option is 50. For example, if you want to increase both vertical and horizontal sensitivity, at the DOS prompt, type:

`TRAK101/S100` <Return>

Larger values make the tracking faster - the 100 entered in the example makes a very fast trackball. Smaller values make the tracking slower.

All trackball command line options must be entered with the following format:

**TRAK1<sup>01</sup> /S<nnn>** — Number from 0 - 100

——— Mouse Option:  
/S. /H. /V. /D

————— Driver Name

A space must precede each "/" character in the command line. You can issue as many options as needed from a single command line. Trackball command line options can also be used to switch ports or used to load the trackball driver and specify the port as shown below:

TRAK101 /1 (Loads driver and selects COM port 1)  
TRAK101 /2 (Loads driver and selects COM port 2)

See Appendix B, Command Line Switches, for a complete listing of all trackball command line switches.

**Trackball Controls**

---

**ADJUST Utility Program**

Key Sequence: *Alt - A*

The ADJUST utility allows you to change the horizontal and vertical sensitivity and trackball speed. ADJUST is a terminate and stay resident (TSR) program.

ADJUST can be activated from any text based programs running under DOS by pressing *Alt - A*. ADJUST works only in text mode. It will not pop up on top of a graphics application.

You may leave ADJUST without making any changes by clicking on Cancel or pressing the Esc key.

Trackball Sensitivity

0	Horizontal	10
0	Vertical	10
0	Speed Threshold	10
<input type="button" value="Change"/> <input type="button" value="Reset"/> <input type="button" value="Cancel"/>		

The scale boxes are marked 0 through 10. This is shorthand for 0 through 100. You may change sensitivity by as little as 5, since there are intermediate positions in the scale boxes. 0 is the least sensitive and 100 is the most sensitive.

Refer to the TRAK101 Assist Program for additional information on ADJUST.

---

## Section 5

## KEYBOARD MAINTENANCE

Section 5 describes how to clean the TRAK101™ keyboard and how to purchase keyboard protection accessories. This section also describes how to change the key feel with a Custom Key Feel Kit.

### *Cleaning The Keyboard*

---

The TRAK101 keyboard is designed and manufactured to operate without preventive maintenance. However, you may want to clean the keyboard exterior periodically. Use a mild, household-type cleaner and a soft, damp, lint-free cloth or paper towel.

To prevent spray cleaner from running into the keyboard, spray the cleaning solution onto a cloth or paper towel. Avoid spraying directly onto the keyboard. Be careful not to wipe dirt into the keyboard or trackball.

<p><b>Note:</b> Do not use a petroleum-based solvent, as this will damage the plastic keyboard enclosure and painted surfaces.</p>
--

### *Maintenance Free Trackball*

---

The trackball module in the TRAK101 keyboard contains self-cleaning mechanisms. Take precautions to protect your trackball from accidental spills and unusually harsh environments.

<p><b>Note:</b> The trackball module has no user-serviceable parts. Attempts to open or service your trackball will void your TRAK101 warranty. Should you experience problems, refer to Appendix C for instructions on returning your TRAK101.</p>
---

**Keyboard  
Accessories**

---

Keyboard protection items such as dust covers, anti-static mats, and mini vacs, can be purchased through the Key Tronic's Accessories Department.

Information on a number of accessories to enhance and protect your keyboard and computer can be obtained by calling Key Tronic Accessories at 1-800-262-6006.

**Modifying the Key  
Feel**

---

While Key Tronic prides itself on its keyswitch technology that provides a consistent, positive tactile response, some users may prefer the key feel or touch to be slightly firmer or lighter.

Key Tronic offers a "Custom Key Feel Kit" allowing you to modify the key feel by changing the rubber domes in your keyboard. (Rubber domes are located underneath the keycaps and control the responsiveness of a key.)

Your TRAK101 keyboard is equipped with 2.0-ounce rubber domes from the factory, but can be changed to 1.0, 2.5 or 3.0-ounce rubber domes.

The 1.0-ounce rubber dome kit provides a lighter feel, and the 2.5 or 3.0-ounce kits provide a firmer feel.

The kit includes enough rubber domes (75) to modify the feel for all the white keys on the keyboard (with the exception of the space bar), a keycap removal tool and installation instructions.

---

## Appendix A

## COMMAND LINE SWITCHES

The Command Line Switch Appendix provides a detailed listing of all command line switches for making changes to the trackball.

### *Command Line Switches*

---

Trackball command line switches can be used to change trackball settings that may include vertical and horizontal sensitivity or to switch ports for example. Command line options can be issued at any time from a DOS prompt.

Command line switches can start with either "/" or "-", and the options can be in either upper or lower case.

In the following descriptions, option letters are shown in upper case. Use a number from 0 to 100 in place of <n>.

The default setting for each option is 50. For example, if you want to increase both vertical and horizontal sensitivity, at the DOS prompt, type:

```
TRAK101 /S100 <Return>
```

Larger values make the tracking faster - the 100 entered in the example makes a very fast trackball. Smaller values make the tracking slower.

All trackball command line options must be entered with the following format:

**TRAK101 /S<nnn>** — Number from 0 - 100

Trackball Option:  
/S, /H, /V, /D

Driver Name

## **Command Line Switch Listing**

---

A space must precede each "/" character in the command line. You can issue as many options as needed from a single command line.

- /Sn* Set sensitivity 0-100 (horizontal and vertical)  
*Default: 50*
- /Hn* Set horizontal sensitivity only  
*Default: 50*
- /Vn* Set vertical sensitivity only  
*Default: 50*
  
- /OFF* Remove mouse driver from memory if possible
  
- /Mn* Select ballistic profile 1-4  
*Default: 2 (Moderate)*
  
- /Cn* Install serial driver on COM port n  
(with PS/2 style addressing for COM 3 and 4)
- /CnA* Install serial driver on COM port n  
(with PS/2 style addressing for COM 3 and 4)
  
- /1* Install serial driver on COM 1
- /2* Install serial driver on COM 2
- /3* Install serial driver on COM 3 (with PS/2 style  
addressing)
- /4* Install serial driver on COM 4 (with PS/2 style  
addressing)
  
- /3A* Install serial driver on AT-style COM 3
- /4A* Install serial driver on AT-style COM 4
  
- /Z* Install PS/2 driver for PS/2 mouse port

**Note:** Certain command line switches will be changed in Version 8.xx for complete compatibility with the Microsoft Version 8 driver.

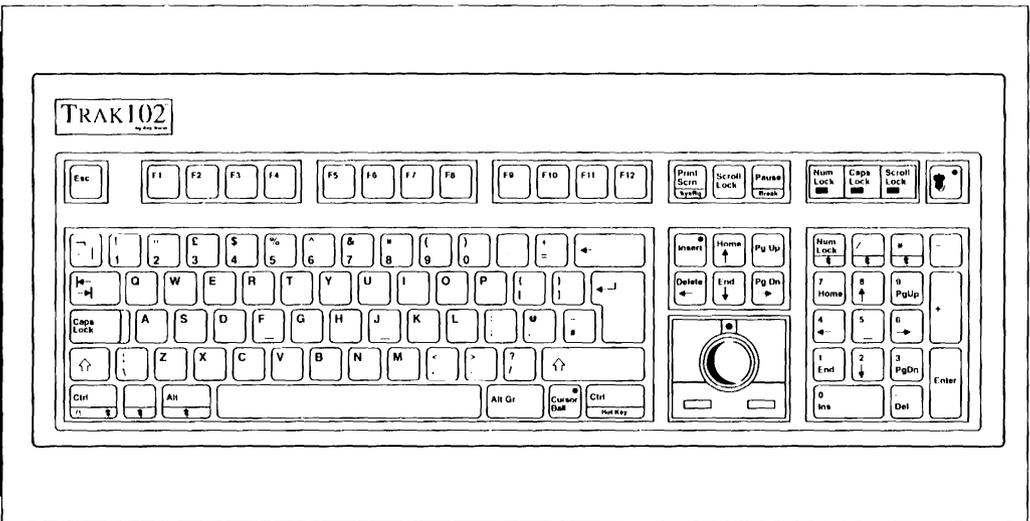
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**Appendix B****TRAK102 SPECIFIC INFORMATION**

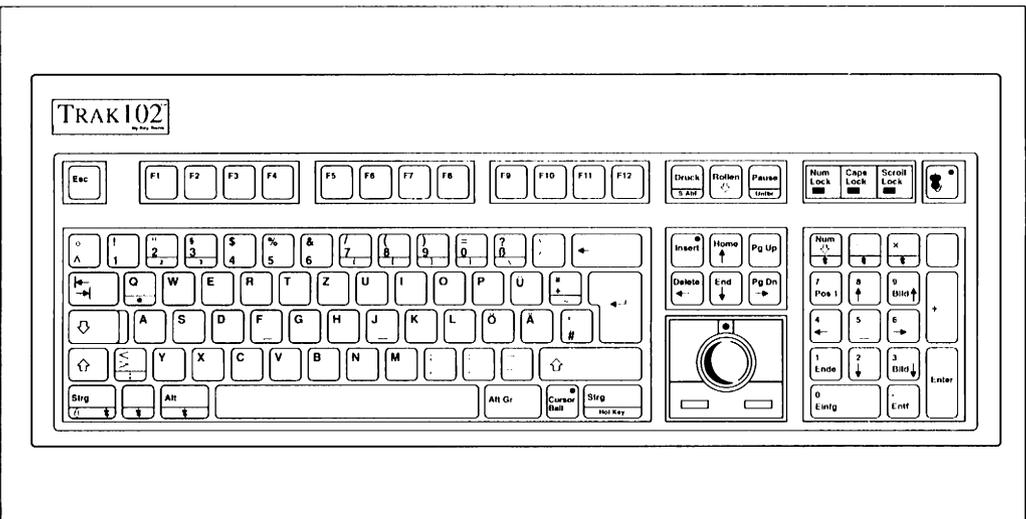
Appendix B provides TRAK102 users with specific information that only pertains to the TRAK102 keyboard.

Included in Appendix B are the keyboard layouts for all four TRAK102 language options: TRAK102, UK - United Kingdom, TRAK102, GR- German, TRAK102, FR - French, and TRAK102, SV - Swedish.

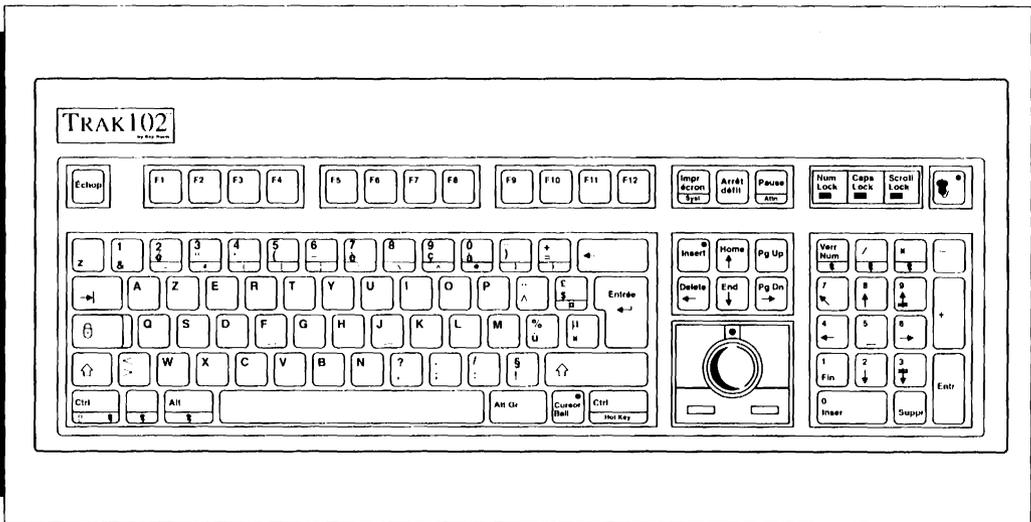
This section also provides instructions for keyboard driver installation and macro driver installation and use.



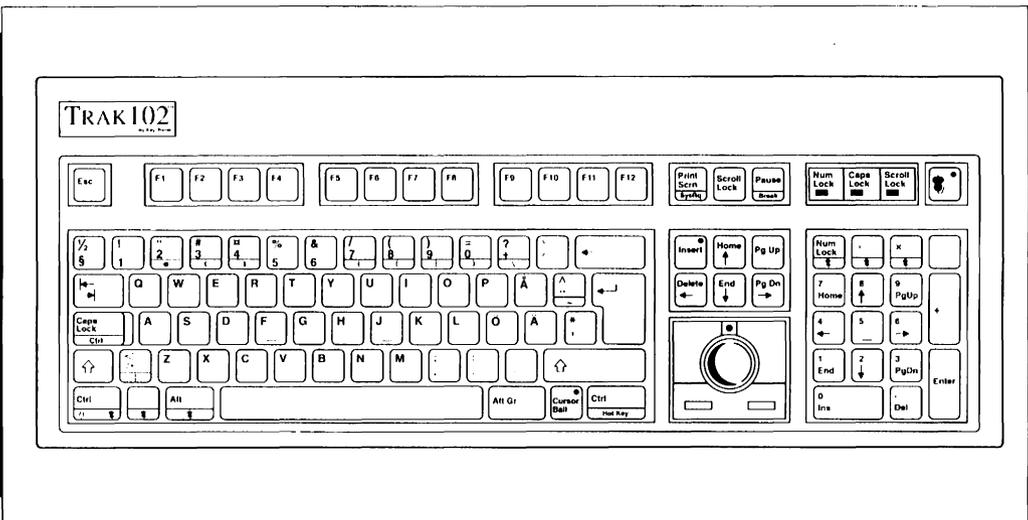
TRAK102, UK - United Kingdom



TRAK102, GR - German



TRAK102, FR French



**TRAK102, SV - Swedish**

## **Keyboard Driver Installation**

---

Two features of the TRAK102 keyboard allow more efficient and easier keyboard operation: the keyboard drivers and the keyboard macro driver.

The keyboard drivers allow you to convert the TRAK102 keyboard to four different language options. The keyboard drivers convert the scan codes generated by the keyboard to specific language character sets.

The keyboard macro driver allows you to assign sequences of characters to any key. A single key can contain lengthy commands for your word processing, spreadsheet, or database applications or any other program. One key can be assigned frequently used names, phrases, or even complete sentences.

The keyboard macro driver is discussed in detail later in this Section.

Both the keyboard drivers and keyboard macro driver are contained on the Key Tronic Software Disk that is included in your keyboard box. The keyboard drivers contained on the disk are listed below.

- 
- KB102UK.COM.... United Kingdom kybd. driver
  - KB102GR.COM ... German keyboard driver
  - KB102FR.COM .... French keyboard driver
  - KB102SV.COM .... Swedish keyboard driver

Keyboard driver programs

---

***Loading The  
Keyboard Driver***

---

The keyboard driver is a RAM resident program that needs to be loaded into memory every time you turn ON or reset your computer. This is accomplished by using standard DOS commands as outlined below.

**Note:** Make a "back-up" copy of the Key Tronic Software Disk to use as a work copy before loading the keyboard driver. Store the original Key Tronic Software Disk in a safe, secure place. Refer to your DOS manual if you need assistance in copying and formatting diskettes.

*Follow these steps if you have a hard disk system:*

- Step 1.** Place the work copy of the Key Tronic Software Disk into your A drive and copy the keyboard driver with the desired language option to the root directory. For example, to load the UK keyboard driver, type the following:

*A:> COPY KB102UK.COM C:\ <Return>*

- Step 2.** Load the keyboard driver into memory by typing the following from the DOS prompt.

*C:> KB102UK <Return>*

## ***Loading The Keyboard Driver***

---

The message shown below is displayed on your monitor to indicate the keyboard driver is loaded.

---

Key Tronic extended keyboard driver  
Copyright Key Tronic Corp. 1991  
United Kingdom Ver. 1.1

---

*Follow these steps if you have a floppy disk system:*

- Step 1.** Place the work copy of the Key Tronic Software Disk into either drive and enter the name of the desired keyboard driver. For example, to load the UK keyboard driver, type the following:

*KB102UK*                      <Return>

The same message shown above will be displayed.

## ***Enhanced Keyboard Option***

---

When loading the keyboard driver on computers that do not have extended BIOS, add "/e" after the driver name (C:>KB102UK /e). This ensures compatibility with software requiring enhanced keyboard routines.

If you are unsure if your computer has enhanced BIOS, load the driver without the "/e" option. The driver will display a message to use the "/e" option if needed.

***Automatic  
Loading***

---

The desired keyboard driver file can be loaded automatically each time the computer is turned ON or reset by adding the name of the keyboard driver to your AUTOEXEC.BAT file.

If you are not familiar with batch files or the AUTOEXEC.BAT file, refer to your DOS Manual for detailed information.

Be sure to reset your computer after modifying the AUTOEXEC.BAT file.

***Using The  
Keyboard Driver***

---

Until the keyboard driver is loaded into memory, the U.S. character set is used. Once the desired keyboard driver is loaded, you can toggle between the U.S. character set and the international character set that is currently loaded. Press Ctrl-Alt-F1 to use the U.S. character set. Press Ctrl-Alt-F2 to return to the international character set.

## ***The Keyboard Macro Driver***

---

The KB102 keyboard macro driver provides features that make any computer keyboard operation easier and more efficient. With the keyboard macro driver loaded into memory, you can assign one or more characters — text, numbers, or commands — to a single key.

For example, you can define specific keys to store frequently used names, phrases, or even complete sentences. Or, lengthy commands commonly used in your spreadsheet, database, and word processing programs can be assigned to one key.

## ***Macro Driver Installation***

---

The software needed to perform keyboard macro functions is contained on the KB102 Keyboard Driver Disk as shown below. The macro drivers contain the same keyboard drivers that were discussed earlier in this section, but also add macro capability.

- MC102UK.COM .... United Kingdom macro driver
- MC102GR.COM .... German macro driver
- MC102FR.COM ..... French macro driver
- MC102SV.COM .... Swedish macro driver

Macro driver programs.

The keyboard macro driver, like the keyboard driver, is a RAM resident program that needs to be loaded into memory every time you turn ON or reset your computer. This is accomplished by using standard DOS commands as outlined on the following page.

**Macro Driver  
Installation**

---

**Note:** Before using the keyboard macro driver, make a “back-up” copy of the KB102 Keyboard Driver Disk to use as a work copy. Store the original KB102 Keyboard Driver Disk in a safe place. Refer to your DOS manual if you need assistance for copying and formatting diskettes.

*Follow these steps if you have a hard disk system:*

- Step 1.** Place the work copy of the KB102 Keyboard Driver Disk in your A drive and copy the keyboard macro driver with the desired language option to the “root directory”. The example below shows how to copy the United Kingdom keyboard macro driver (MC102UK.COM), to the C drive.

```
A:>COPY A:MC102UK.COM C:\  
<Return>
```

- Step 2.** Load the keyboard macro driver into memory by typing the following from the DOS prompt:

```
C:> MC102UK <Return>
```

## **Macro Driver Installation**

---

The message shown below is displayed on your monitor to indicate the keyboard driver with macro capability has been loaded.

```
Key Tronic extended keyboard driver
Copyright Key Tronic Corp. 1991
Macro support
Ver. 1.1 U.K.
Maximum ** 32 macros ** each 32 bytes long
Macro filename not found
```

The last line of the message shown above, "Macro filename not found." is displayed because the driver is looking for a user-defined macro file. For example, if you entered, MC102UK FILENAME.KBM, this line would not be displayed. Loading user-defined macro files automatically with the keyboard macro driver is discussed in detail later in this section. Loading the keyboard macro driver without a user-defined macro, as shown above, does not affect the operation of the keyboard macro driver.

*Follow these steps for floppy disk systems:*

**Step 1.** Place the work copy of the Key Tronic Software Disk into either drive and enter the name of the keyboard macro driver. To load the UK keyboard macro driver, type the following from the DOS prompt:

```
MC102UK <Return>
```

The same message shown above will be displayed to indicate the keyboard macro driver is loaded.

***Automatic Loading***

---

The desired keyboard macro driver file can be loaded automatically each time the computer is turned ON or reset by adding the name of the keyboard macro driver to your AUTOEXEC.BAT file.

If you are not familiar with batch files or the AUTOEXEC.BAT file, refer to your DOS Manual for detailed information.

Be sure to reset your computer after modifying the AUTOEXEC.BAT file.

***Enhanced Keyboard  
Option***

---

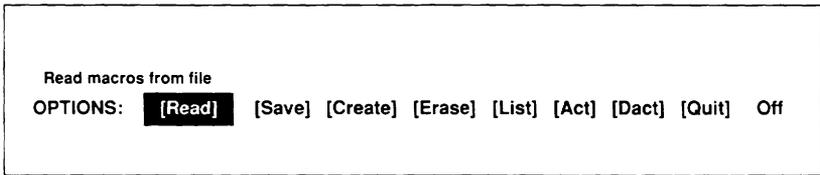
When loading the keyboard macro driver on computers that do not have extended BIOS, add "/e" after the driver name (C:>MC102UK /e). This ensures compatibility with software requiring enhanced keyboard routines.

If you are unsure if your computer has enhanced BIOS, load the driver without the "/e" option. The driver will display a message to use the "/e" option if needed.

## **Using The Macro Menu**

---

Once the keyboard macro driver is loaded into memory, you can use the macro function from DOS or most of your application programs. To display the macro menu, hold down either SHIFT key and press F12. The macro menu is displayed at the bottom of your screen as shown below.



### **Macro Menu**

You can cycle through the menu bar options by pressing the spacebar or using the arrow keys on the cursor control keypad. Notice that a brief description is given for each menu option in the top line of the menu bar. When the desired menu option is highlighted, press ENTER.

You can also select any menu option by typing the first letter of the desired entry.

If you are in one of the sub-menus and wish to return to the macro menu press ESCAPE.

You can remove the macro menu from your screen by one of the following:

- Press ESCAPE
- Press "Q" for Quit
- Move to the Quit menu option and press ENTER

**Macro Example**

---

The following example creates three macros that define the number “1” key to display your name using the DOS ECHO command, the “D” key to perform the DOS DIRECTORY command, and the “C” key to perform the DOS CHKDSK command.

**Step 1.** Press SHIFT and F12 to display the macro menu.

**Step 2.** To create a new macro, press the spacebar twice so that the [Create] menu option is highlighted and press ENTER, or you can simply type “C”.

**Step 3.** The macro menu is replaced with a window prompting you to press the key you want to define for a macro. In this case, type number “1”.

**Step 4.** You are now prompted to enter the macro assignment . Type in the following:

```
echo Alfred A. Alexander ~
```

Substitute your name for Mr. Alexander's. The tilde character “~”, represents a carriage return used to invoke the DOS ECHO command.

<p><b>Note:</b> On keyboards not having the “tilde” character “~”, press the F12-Enter key combination to obtain the tilde character.</p>
---

If you make a mistake, use the cursor control keys to go back and make any corrections.

Press ENTER when finished entering the macro assignment to return to the macro menu.

- Step 5.** Define the second macro by highlighting the [Create] menu option and pressing ENTER. Press "D" and type in the following macro assignment:

dir/p ~

Press ENTER when finished to return to the macro menu.

- Step 6.** Create the third macro by highlighting the [Create] menu option and pressing ENTER. Press "C" and then enter the following macro assignment.

chkdsk ~

Press ENTER when finished.

- Step 7.** Save the macro to disk by using the spacebar to highlight [Save] and press ENTER or just type "S".

***Macro Example***

---

Enter a filename of up to eight characters long. For this example enter, DOSEXP.KBM . Entering the .KBM extension is optional, but it is recommended so that you can easily identify your keyboard macro files. DOSEXP.KBM is now written to disk so you can reset or turn OFF the computer without losing the macro.

***Note:*** When saving a file you can specify the drive and sub-directory. If not specified, the macro is saved to the current drive and directory.

**Step 8.** To test the macro, press ESCAPE to remove the macro menu from the screen and return to DOS. Press function key F12, the macro "hot key", then type number "1". Your name is displayed on the screen.

If you type number "1" again, only the "1" is displayed. This is because the macro default mode allows the macro to be performed once and then reverts back to its normal keyboard function. If you want to invoke the macro again, just press F12, followed by the number "1" key.

Now press F12 and the letter "D". The directory command is issued and the directory is listed, pausing when the screen is full: press any key to display the next screen.

## **Macro Example**

---

Next press F12 and the letter "C" to perform the DOS chkdsk command.

If you want to invoke the macro without having to press the "hot key" (F12), select [Act] (Activate), from the macro menu. Notice that when [Act] is selected, the On/Off toggle located in the extreme right-hand corner of the macro menu, changes to On. If you want to return to {one-time-only} operation (default mode), select [Dact] (Deactivate), from the macro menu. This changes the On/Off toggle in the macro menu back to Off.

## **Macro Menu Options**

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All Macro Menu Options are listed below, followed by a brief description:

- [Read]** Loads a macro into memory that has been previously saved to disk.
- [Save]** Saves a newly created macro to disk.
- [Create]** Assigns a macro message or command to a specific key or certain key combinations.
- [Erase]** Deletes all existing macros from RAM memory. Macros previously saved to disk, are not deleted.
- [List]** Shows the macro assignments for individual macros. Use the spacebar to step through the list.

**Macro Menu  
Options**

---

When the desired macro is displayed, you can make changes to key assignments by pressing “C”, or erase selected macros by pressing “E”. The display shows which macro you are viewing and what key is used to activate the macro.

- [Act]** Activates any macro so that you don't have to press F12 first to perform the macro for a key. However, when Activate is toggled On, you will not be able to obtain the normal key function.
- [Dact]** Deactivates all macros so that keys assigned to macros will display their normal key function until pressing F12.
- [Print]** Prints a list of all macros, listing the key number, macro key, and the actual macro assignment.
- [Quit]** Returns you to the previous application.

There are two ways to edit existing macros: through the [List] menu option or the [Create] menu option. Editing an existing macro file using the [List] menu option is described below.

- Step 1.** Press SHIFT and F12 to display the macro menu.
- Step 2.** Select the [Read] menu option by pressing "R" and load DOSEXP.KBM or the desired macro file into memory.
- Step 3.** Select the [List] menu option by pressing "L".
- Step 4.** The first macro is displayed as shown below. Use the spacebar to cycle through all defined macros for that file until the desired macro is displayed.

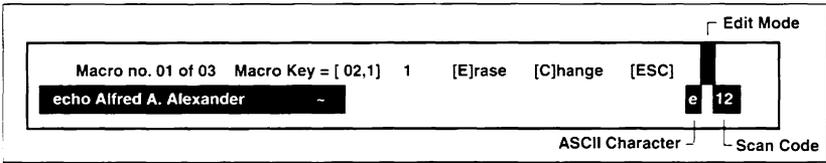
```
Macro no. 01 of 03 Macro Key = [ 02,1] 1 [E]rase [C]hange [ESC]
echo Alfred A. Alexander ■
```

**Note:** All control characters, such as the ENTER key, are represented by a square meaning it is not a printable character. When you go to the "change" window the square is replaced by the actual symbol, in this case a tilde character "~".

**Editing Macros**

**Step 5.** Press "C" to change the macro. The editing window changes to show the cursor positioned on the first character of the macro assignment as shown below. The right-hand corner of the screen displays the following:

- Edit Mode - Insert (I) or Replace (blank)
- ASCII character
- Scan code



Use the right arrow key on the cursor pad to cycle through the macro assignment. Notice how the character and scan code boxes change with each character.

Now press the INSERT key on the cursor keypad and observe that an "I" is inserted into the edit mode box. Press the INSERT key again to toggle back to replace mode.

**Step 6.** Make the desired changes to the macro assignment by positioning the cursor with the arrow keys. Use the Backspace or Delete keys to erase characters.

## ***Editing Macros***

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- Step 7.** When all the desired changes have been made, press ENTER to display the next macro. Continue in this manner until all editing is complete. Press ESCAPE to return to the macro menu.
- Step 8.** Select the [Save] menu option by pressing "S" to save the changes to disk. You will be prompted with "File exists overwrite <Y/N>". Enter "Y" to save the changes you just made or enter "N" to leave the file unchanged.
- Step 9.** Return to your application and test the macro function.

Editing macro key assignments with the [Create] menu option works basically the same way just described. However, you cannot cycle through the macros with the spacebar.

## ***Using Macros With Your Applications***

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If you are using macros with application programs you may want to create batch files that load your macro file and application program automatically. Adding the following line to your AUTOEXEC.BAT file will automatically load the practice macro file you created earlier, DOSEXP.KBM and the UK keyboard macro driver, MC102UK.COM.

```
MC102UK DOSEXP.KBM <Return>
```

Now upon power up or system reset, the UK keyboard driver, the keyboard macro driver, and the DOS macro file are loaded automatically.

***Additional Tips  
On Macro Usage***

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- You may assign macros to key combinations such as Alt-A, Ctrl-B, Shift-C, etc. However, alphabetic or numeric key combinations such as 1-a, B-2, C-C, etc. are not allowed for macro key combinations.
- When using macro editing keys, Insert, Delete, Escape, Cursor Left/Right, Enter, etc. in a macro string, you must first press the F12 function key and then the desired macro editing key. This will allow the macro editing key to be accepted as part of the macro string.

For example, if you wanted to enter a macro string with the letters A, B, and C followed by the INSERT key, you would press A, B, C, the F12 function key, and the Insert key:

ABC<F12><Ins>

The entry would be displayed as shown below:

ABC ■

The black square indicates a macro editing key (non-printable character) has been entered. Move the cursor to the black square and notice that the ASCII character and scan code for the INSERT key is displayed in the black boxes in the right hand corner of the screen.

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## Appendix C

## CUSTOMER SUPPORT INFORMATION

The Customer Support Information Appendix includes the following information:

- How to Obtain Technical Assistance
- Instructions on Returning Keyboards for Repair
- Three Year Limited Warranty

### *Technical Assistance*

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Key Tronic makes every attempt to ensure you have purchased a keyboard of unsurpassed quality. Key Tronic Professional Series keyboards undergo rigorous testing and are rated at 100 million keystrokes. While the TRAK101/TRAK102 User's Guide is written and designed to provide you with complete, accurate and easy-to-understand instructions on using your keyboard, Key Tronic does not warrant the information contained herein. We encourage you to use this User's Guide as your primary source of information about the keyboard. If you should find any inaccuracy within this User's Guide please contact us at one of the support numbers listed below.

For additional support, Key Tronic Product Support Specialists are available to assist you from 7:00 AM through 3:00 PM PST, Monday through Friday. Their telephone numbers are listed below.

<p><b>Key Tronic Product Support</b> <b>1-800-262-6006</b> (U.S. Toll Free Line) <b>1-800-348-6006</b> (Canada Toll free Line) <b>(509) 927-5515</b> (outside continental U.S. or Canada)</p>
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***Technical  
Assistance***

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European customers needing technical assistance or encountering keyboard problems should contact an authorized Key Tronic Distributor. The dealer you purchased your keyboard from can provide you with the name and address of the Key Tronic Distributor nearest you.

Your Key Tronic Distributor will contact a Customer Service Representative from Key Tronic who will determine whether a keyboard needs to be returned to Key Tronic for repair. Upon authorization of return, your distributor will give you shipping instructions.

***Return for Repair  
Procedure***

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If a keyboard proves defective, you may return it to Key Tronic for repair. To qualify for "in-warranty repair", proof-of-date-of-purchase must be included with the returned keyboard.

Before returning the keyboard, contact Key Tronic Product Support to make sure that the problem cannot be solved over the telephone.

The following steps explain the procedures for returning your keyboard:

- Step 1.** Call Key Tronic Product Support for a Return Authorization (RA) number. The Product Support Specialist will obtain your name, address and phone number, the keyboard model and serial number, and a description of the problem. The address of the nearest repair center will be given to you.
- Step 2.** Carefully pack the keyboard in its original shipping container if possible. If the original container is not available, wrap the keyboard in non-static material such as newspaper and pack it in a sturdy cardboard box. Please be sure the RA number is visible on the shipping label.

<p><b>Note:</b> To qualify for "in-warranty" repair service on your keyboard, a copy of the sales receipt or invoice showing the date purchased must accompany the keyboard.</p>
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***Return for Repair  
Procedure***

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**Step 3.** Keyboards returned to Key Tronic for repair must be shipped prepaid. It is recommended that the keyboard be insured when shipped.

***Note:*** Key Tronic will not accept units without a Return Authorization Number posted on the outside of the shipping carton.

Keyboards repaired under warranty will be returned by prepaid UPS or equivalent service.

For "out-of-warranty" keyboards, follow the steps listed above. Repairs will be made at your expense. Normal turn-around is 10 working days on prepaid returns, subject to availability of parts. Keyboards will be returned to you at your expense by UPS or equivalent service unless otherwise specified or requested.

***Limited Warranty***

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Key Tronic Corporation warrants the products which it manufactures to be free from defects in materials and workmanship for a period of three (3) years from the date of purchase from Key Tronic or an authorized Key Tronic dealer. This warranty is limited to the original purchaser and is not transferable.

During the three (3) year warranty period, Key Tronic will repair or replace, at its option, any defective products or parts at no additional charge, provided that the product is returned, shipping prepaid, to Key Tronic, an authorized dealer or an authorized service location. The purchaser is responsible for insuring any returned product and assumes the risk of loss during shipping. All replaced parts and products become the property of Key Tronic.

Proof-of-purchase showing the date of purchase must be provided by the purchaser when requesting that warranty work be performed. The purchaser may request information on how to obtain warranty service by contacting an authorized dealer or writing to Key Tronic, P.O. Box 14687, Spokane, WA 99214, U.S.A., or by calling **1-800-262-6006**, in Canada **1-800-348-6006**. If calling from outside the continental U.S.A. or Canada, call Spokane, Washington, U.S.A., **(509) 927-5515**.

This limited warranty does not extend to any products which have been damaged as a result of accident, misuse, abuse, or as a result of service or modification by anyone other than Key Tronic, an authorized dealer or an authorized service location. This limited warranty does not extend to the use of this product with any equipment other than the equipment for which it is designed.

## **Limited Warranty**

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EXCEPT AS EXPRESSLY SET FORTH ABOVE. NO OTHER WARRANTIES EXPRESS OR IMPLIED ARE MADE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. KEY TRONIC EXPRESSLY DISCLAIMS ALL EXPRESS OR IMPLIED WARRANTIES NOT STATED HEREIN. IN THE EVENT THE PRODUCT IS NOT FREE FROM DEFECTS AS WARRANTED ABOVE, THE PURCHASER'S SOLE REMEDY SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. UNDER NO CIRCUMSTANCES WILL KEY TRONIC BE LIABLE TO THE PURCHASER OR ANY USER FOR ANY DAMAGES, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES, LOST PROFITS, LOST SAVINGS, OR OTHER DAMAGES ARISING OUT OF THE USE OF, OR INABILITY TO USE THE PRODUCT, EVEN IF THE POSSIBILITY OF SUCH DAMAGES IS MADE KNOWN TO KEY TRONIC CORPORATION.

Some states do not allow the exclusion or limitation of incidental or consequential damages for consumer products, and some states do not allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## 9-25 Pin Adapter Request Card

Computers with a 25 pin serial port require a 9-25 pin adapter. This adapter is available through Key Tronic Accessory Sales for \$4.95. Call Key Tronic Accessory Sales at **1-509-927-5395**, or return this card.

Name \_\_\_\_\_ Phone (     ) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Please return this card with your check or money order for \$4.95 plus \$5.00 shipping and handling to:

**Key Tronic Accessory Sales  
MS 142-D  
P.O. Box 14687  
Spokane, WA 99214-0687**

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## PS/2 Cable Request Card

IBM Personal System/2 Model computers require a custom cable kit for connecting the TRAK101 or TRAK102 keyboard to the mouse port of your PS/2 computer. Return this card to Key Tronic with \$19.95 for your PS/2 Cable Kit. For further information, call Key Tronic Accessory Sales at **1-509-927-5395**.

Serial Number (S/N) \_\_\_\_\_

Name \_\_\_\_\_ Phone (     ) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Please return this card with your check or money order for \$19.95 plus \$5.00 shipping and handling to:

**Key Tronic Accessory Sales  
MS 142-D  
P.O. Box 14687  
Spokane, WA 99214-0687**

## **TRAK101/TRAK102**

- **PS/2 Cable Kit Request Card**
- **9-25 Pin Cable Adapter Request Card**

**Key Tronic®**

P.O. Box 14687  
Spokane, WA 99214-0687