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<u>Registration</u>	How to register your copy of Judy's TenKey in order to receive a free copy of Judy's Countdown.

## Getting Started

Judy's TenKey™ provides an efficient and easy way to perform mathematical calculations in the Microsoft Windows environment. We suggest you familiarize yourself with the program by using the **interactive tutorial** (use the "Help | Tutorial" menu option), then reviewing the following help sections:

<b>Topic</b>	<b>Description</b>
<a href="#"><u>Installation</u></a>	Specifies steps for installing Judy's TenKey.
<a href="#"><u>Benefits</u></a>	Summarizes the major advantages of Judy's TenKey over the base Microsoft Windows calculator.
<a href="#"><u>Display Components</u></a>	Describes the basic display elements.
<a href="#"><u>Configuring Your TenKey</u></a>	Helps you set up Judy's TenKey to best suit your individual needs.
<a href="#"><u>Example Operations</u></a>	Outlines the basic approach to performing calculations and provides several examples.
<a href="#"><u>Registration</u></a>	How to register your copy of Judy's TenKey in order to receive a free copy of Judy's Countdown.

## Benefits Of Judy's TenKey

Judy's TenKey™ makes your calculations easier and more reliable. If you're still using an old-fashioned desktop calculator, you'll love the integration Judy's TenKey gives you with your other Windows applications. If you use the default Windows calculator, you'll find that Judy's TenKey gives you many additional benefits:

### History Tape:

Records your calculations in a scrolling list which you can annotate, save, print, and resize (a *real* help in keeping track of your calculations). You can also modify and insert new tape entries, causing the tape to recalculate, or reuse previous entries in new calculations (saving typing and reducing errors).

### Selectable Syntax:

Judy's TenKey can process numbers like a normal calculator, a scientific calculator (RPN), or an adding machine. If you are familiar with one and not another, you know how difficult and frustrating it can be to try to switch. Judy's TenKey can behave quite flexibly . . . name your preference.

### Customizable Display:

Allows you to decide how you want your TenKey to look (selecting from tape, memory, statistics, functions, trigonometry, finance, and number pad options), enabling you to optimize screen usage. Any TenKey function can always be activated via the keyboard regardless of the current display configuration.

### Financial Calculations:

Judy's TenKey can calculate monthly payments for most loans (e.g., cars, houses, etc.), expected investment growth, necessary retirement savings, inflation adjustment, and more. Judy's TenKey supplies several intuitive dialogs to make these financial calculations easy, and records each calculation on the tape so that you can later review different scenarios.

### Statistics:

The scrolling tape provides a natural interface for statistical calculations, including average value, sum, or even standard deviation. Simply select the desired lines, then press the appropriate statistics button.

### Intelligent Cut & Paste:

You can copy tape entries to other applications, including Microsoft Word, Excel, and Quicken. You can also paste input from these applications into Judy's TenKey, and if extraneous text and special formatting are mixed in with your numbers, Judy's TenKey

can use heuristic reasoning to extract and interpret the desired information.

#### Decimal Selection:

You can set Judy's TenKey to display the number of decimal positions you prefer, ranging from 0 to "as needed". In fact, you can configure Judy's TenKey to automatically insert the decimal point for you (a real favorite with professional accountants). If you frequently deal with money, you may want to set the decimals to 2 (for cents) or 0 (for dollars).

#### Extra Touches:

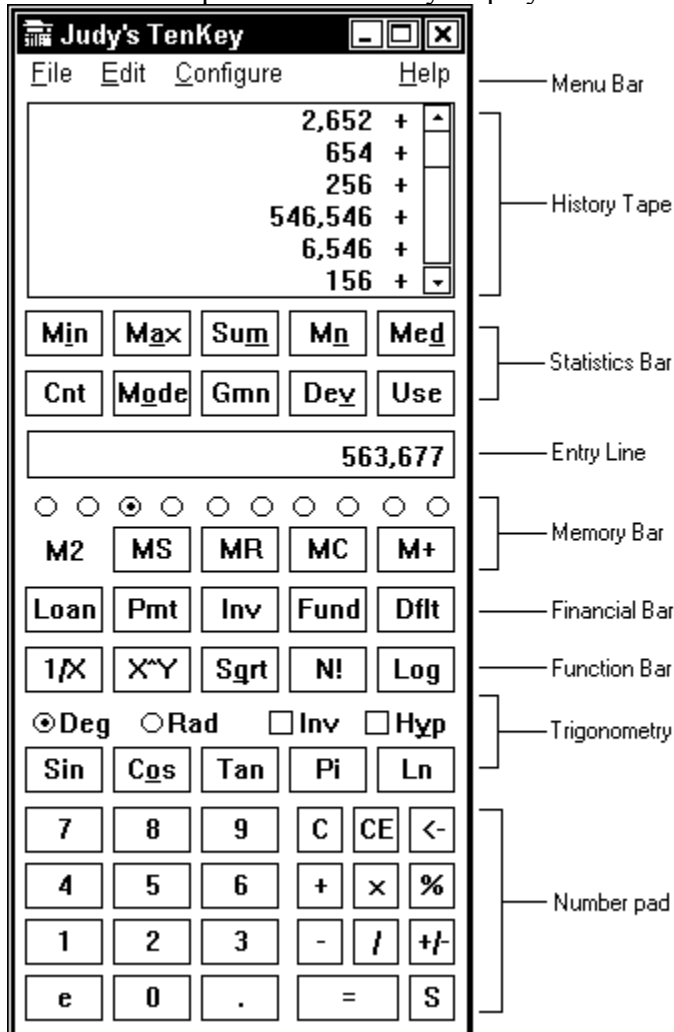
Judy's TenKey remembers your favorite screen position and displays itself there every time; it can also be set to stay on top of all other windows. Judy's TenKey uses thousands separators for moderately large numbers (commas in the United States; "1,000,000" as opposed to "1000000"), displays negative numbers in red, and allows you to use the backspace key to edit results for further calculation. It also allows you to change the function of the <Enter> key (in case you are used to another key, like a "+", in that position. And finally, Judy's TenKey includes a "Tip of the day" feature to gradually introduce you to its many powerful capabilities.

#### Better Performance:

Judy's TenKey enables you to work faster and more reliably. Once you can see (and reuse!) the numbers in your calculations, you will never return to the default Windows calculator. Judy's TenKey also lets you work with larger and smaller numbers more easily (try entering 10,000,000,000,000 in the Microsoft calculator, or  $10e-12$ ...difficult, if not impossible). Judy's TenKey also provides storage for up to 10 numbers in memory, and any others can be placed on the tape and later reused as desired.

## Display Components

Judy's TenKey provides 9 major display components, as illustrated below. You can choose whether or not to include many of these components in your TenKey display by using the "Configure" menu option; all commands are accessible via the keyboard whether or not the associated component is currently displayed.



You can also choose to display the tape on the side, saving some vertical screen space, by using the "Configure | Component | Tape" menu command.

Component	Description
<u>Menu Bar</u>	A command interface that enables you to configure the appearance and the operation of Judy's TenKey, to save and print tape files, and to access this help documentation.
<u>History Tape</u>	A scrolling list that records the numbers you type and the results of your calculations. You can update your calculations by editing the tape

directly; it holds your last 300 entries, and has a variety of display options. When necessary, the history list displays a scroll bar on the right; use the scroll bar to review your work by clicking on the arrow or dragging the thumb button.

<u>Memory Bar</u>	A row of radio buttons, each one corresponding to a memory cell, above a row of memory action buttons that apply to the currently selected memory.
<u>Statistics Bar</u>	Two rows of buttons that perform calculations using selected tape entries, such as average and standard deviation.
Entry Line	Displays numbers as you type them, intermediate subtotals, and final results of your calculations. This line is the main interface to Judy's TenKey, and cannot be disabled.
<u>Trigonometry Bar</u>	Two rows of controls that support trigonometric functions.
<u>Function Bar</u>	A row of buttons that provides advanced mathematical functions, such as factorial and base 10 logarithm
<u>Finance Bar</u>	A row of buttons that bring up specialized dialogs to answer common financial questions, such as loan payment sizes and retirement fund requirements.
<u>Number Pad</u>	Several rows of buttons that support number entry and basic mathematical operations.

## Tasks

This section explains how you can use Judy's TenKey to accomplish common tasks:

<b>Topic</b>	<b>Description</b>
<u><a href="#">Configuring Your TenKey</a></u>	Helps you set up Judy's TenKey to best suit your individual needs.
<u><a href="#">Standard Calculations</a></u>	How to perform common operations like addition, subtraction, multiplication, percentages, etc.
<u><a href="#">Using The Tape</a></u>	Various options you can perform with the tape, such as saving, printing, editing, and reusing entries.
<u><a href="#">Financial Calculations</a></u>	How to calculate answers to common financial questions.
<u><a href="#">Using Memory</a></u>	When and how to save a number for later reuse.
<u><a href="#">Copy &amp; Paste</a></u>	Basic techniques for exchanging data with other applications.
<u><a href="#">Registration</a></u>	How to register your copy of Judy's TenKey in order to receive a free copy of Judy's Countdown.

## Selecting Visible Components

You can decide which components to show in your TenKey window by using the "Configure | Components" menu.

Components which can be turned on or off include the history tape, memory bar, statistics bar, function bar, trigonometry bar, finance bar, and number pad; the menu bar and entry line are always visible (see also Display Components).

If a component is turned on (i.e., is visible), a check mark appears next to the component's name in the "Configure | Components" menu.

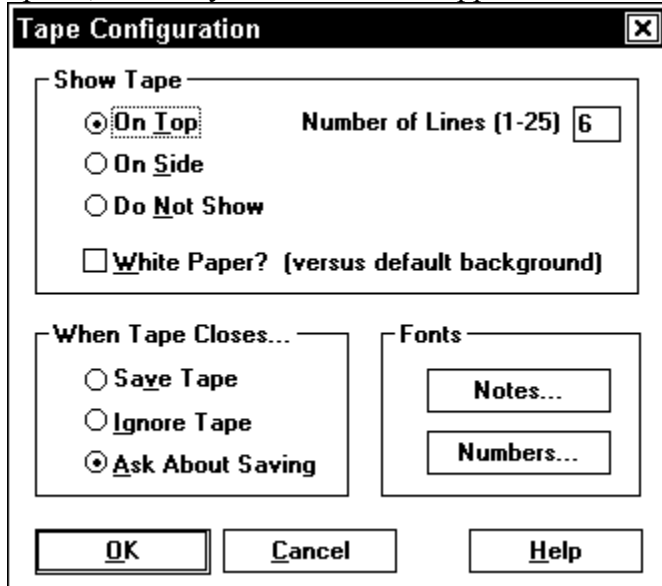
To change a component from visible to invisible (or vice versa), simply select the name of that component from the "Configure | Components" menu. You can control the visibility and the length of the history tape by resizing the main TenKey window, or by using the tape configuration dialog box.

When you initially begin using Judy's TenKey, you may wish to leave everything turned on in order to help you remember the available features. Later, when you are more comfortable with its operation, you may wish to turn off components that do not provide calculation feedback (e.g., number pad, function bar, etc.). By turning off such components, you free up screen space and system resources that you can use for other programs. When you think about it, you really don't need a graphical number pad to perform your calculations . . . the number pad on your keyboard is usually much more convenient and efficient.



## Tape Configuration

The Tape Configuration dialog box, available from the "Configure | Component | Tape" menu option, enables you to control the appearance and the behavior of the history tape.



### "Show Tape" Options

<u>Placement</u>	Put tape on top of all other components, on the side next to them, or hide it completely.
<u>Number Lines</u>	Set the amount of tape to show.
<u>White Paper</u>	Use a white paper background.

### When Tape Closes...

Save Tape	Automatically save tape to disk.
Ignore Tape	Discard any changes without asking.
Ask About Saving	Ask whether to save or not.

### Fonts

<u>Notes</u>	Set font for tape notes.
<u>Numbers</u>	Set font for tape numbers.

Remember to save the TenKey configuration if you want it to work this way next time you run Judy's TenKey.



## Show Tape

Using the Tape Configuration dialog box, you can choose to show the tape on your display or not. Even when you disable the tape display, it still keeps track of your calculations, and can show them upon request.

**To hide the tape**, click the mouse in the radio button next to the words: "Do Not Show".

**To make it visible**, click in the "Show On Top" or "Show On Side" radio buttons.

Remember to save the TenKey configuration if you want it to work this way next time you run Judy's TenKey.

See also Resizing The TenKey Window.

## **Number of Tape Lines Visible**

To change the number of tape lines displayed on the screen at once, either resize the TenKey window or use the Tape Configuration dialog box.

Within the Tape Configuration dialog box, simply type the number of lines you would like to see in the "Lines" field, from 1 - 25. If you use the "Do Not Show" radio button to hide the tape, the "Lines" setting will have no effect.

Remember to save the TenKey configuration if you want it to work this way next time you run Judy's TenKey.

## **Resizing The TenKey Window**

You can resize the main TenKey window just as you resize any other Windows application: hold the mouse down on a window border and drag to the newly desired size. You cannot change the width of Judy's TenKey, but by adjusting its height you can control the number of history lines that it displays (from 0 to as many as fit on your screen).

Note that you can also control the history tape configuration through the "Configure | Component | Tape" menu option.

## **White Paper**

Judy's TenKey can use the default application background color for the tape, or it can use traditional white paper. In either case, printed tapes do not include background colors.

**To use a "white paper" background**, bring up the Tape Configuration dialog box and check the "White Paper" checkbox.

Remember to save the TenKey configuration if you want it to work this way next time you run Judy's TenKey.

## Tape Close Behavior

When you close a TenKey tape (by exiting the program, opening a different tape, etc.), Judy's TenKey can automatically save it, ask you if you want it saved, or simply ignore it (thereby losing any unsaved work).

### To change the current tape closing behavior,

- 1) Bring up the Tape Configuration dialog box.
- 2) Select the radio button next to the option you prefer:

<i>Save Tape</i>	Automatically save tape to disk.
<i>Ignore Tape</i>	Discard any changes without asking.
<i>Ask About Saving</i>	Ask whether to save or not.
- 3) Save the configuration for this change if you want it to work this way next time you run Judy's TenKey.

Judy's Applications employees generally prefer the "Ignore Tape" setting, since we rarely save tapes to files anyway.

## Tape Close Dialog

When you close a TenKey tape (by exiting the program, opening a different tape, etc.), Judy's TenKey normally asks if you want to save it before proceeding. You can answer:

*Yes*       Saves the current tape before proceeding with the original request (asking you for a file name if necessary).

*No*        Does not save the tape. Discards any changes you may have made to the tape before proceeding with the original request.

*Cancel*    Aborts the original request, leaving the tape unaffected.

**If you do not want to see this dialog box again**, you can change how Judy's TenKey handles tape closings (whenever you exit the program, open a different tape, etc.):

- 1) Check the "Do not ask again" box.
- 2) Press <Yes> or <No> to continue with the original request (thereby recording your new setting).

Note that you can later change this setting from the Tape Configuration dialog box.



## Number Fonts

To change the font used to display tape numbers,

- 1) Bring up the Tape Configuration dialog box.
- 2) Press the <Numbers...> button in "Fonts" section.
- 3) Select your desired font settings from the standard Windows Font Selection dialog box, then press <OK>.

*Tip:* For best display results, select a simple font like System, bold, size 10. For best printing results, select a True-Type font (New Times Roman, bold, size 11 works very well).

- 4) Press <OK>.
- 5) Save the configuration for this change if you want it to work this way next time you run Judy's TenKey.

See also Note Fonts.

## Note Fonts

To change the font used to display tape notes,

- 1) Bring up the Tape Configuration dialog box.
- 2) Press the <Notes...> button in "Fonts" section.
- 3) Select your desired font settings from the standard Windows Font Selection dialog box, then press <OK>.

*Tip:* For best display results, select a simple font like System, bold, size 10. For best printing results, select a True-Type font (New Times Roman, bold, size 11 works very well).

- 4) Press <OK>.
- 5) Save the configuration for this change if you want it to work this way next time you run Judy's TenKey.

See also Number Fonts.

## Setting The Number Of Decimal Positions

Judy's TenKey allows you to decide how many decimal places you would like to see (in other words, how many digits to the right of the decimal point are shown). Note that setting the number of decimal positions affects only the display; it does not affect internal calculation precision. No matter what your configuration, you can always enter as many decimal digits as you like for a given entry . . . Judy's TenKey will internally keep track of the actual number.

If you frequently deal with money, you might want to set the decimals to 2 (for cents) or 0 (for dollars). If you need to be as precise as possible, use the "As Needed" option in order to display as many as apply to a given result.

Example:	Decimals 0:	"1.279"=>"1"
	Decimals 1:	"1.279"=>"1.3"
	Decimals 4:	"1.279"=>"1.2790"
	Decimals As Needed:	"1.279"=>"1.279"

To change the decimal setting, use the "Configure | Decimals" menu.

See also Automatic Decimal Insertion.

## **Automatic Decimal Insertion**

Judy's TenKey enables you to skip entering the decimal point for every number.

To turn on automatic decimal insertion, select the "Configure" menu option, then select the "Decimals" submenu option. Click the submenu choice that says "Auto Insert" (if it has a check mark next to it, it is already on, and selecting it now will turn it off).

## **Normal Numbers**

Judy's TenKey will assume that the rightmost digits of your numbers correspond to your current number of decimal positions setting.

For example, if you have 2 decimal places configured, typing "1234" will produce "12.34". This mode of operation can save you significant typing when adding long columns of numbers.

## **Scientific Notation Numbers (1.234e+45)**

If you have Scientific Notation set, then Judy's TenKey will automatically append a decimal point after the first digit that you type (assuming that you want all numbers to have only one digit to the left of the decimal point: N.MMM...e+XXX).

## Syntax Overview

Judy's TenKey can process numbers like a normal calculator, a scientific calculator (RPN), or an adding machine. If you are familiar with one and not another, you know how difficult and frustrating it can be to try to switch. Judy's TenKey can behave quite flexibly . . . name your preference.

*Syntax* refers to the order in which you must enter numbers and operations to achieve your desired results. To change syntax, select the "Syntax" menu option under the "Configure" menu. Then select your desired syntax from the submenu that appears:

Calculator Syntax

Tenkey Syntax

RPN Syntax

Note that changing syntax also clears any ongoing calculations.

## Calculator Syntax

This help topic assumes that you are not currently using an adding machine or a scientific calculator (i.e., familiar with tenkey or RPN syntax). If you are, you may find the following discussion somewhat confusing (some of your underlying assumptions may be incorrect). Generally, once you become fluent in a given syntax, there is little to be gained from switching to a new one.

Calculator syntax can basically be expressed as follows:

- 1) Enter a number
- 2) Enter an operation
- 3) Enter a number upon which to perform that operation.
- 4) Repeat steps 2 and 3 as desired.

Examples:     $2 + 3 \quad \Rightarrow 5$   
                   $3 * 3 \quad \Rightarrow 9$   
                   $5 * 3 \quad \Rightarrow 15$   
                   $2 + 3 * 3 \quad \Rightarrow 15$

As the last example illustrates, every operation you enter will combine the previous subtotal with the next number you enter. If you do not enter a number in between operations, the calculator will use your displayed subtotal as the default entry:

Examples:     $2 + 3 + = \quad \Rightarrow 5 + 5 \quad \Rightarrow 10$   
                   $2 + 3 + + 6 = \quad \Rightarrow 10 + 6 \quad \Rightarrow 16$

Note: This may seem somewhat complex, but since the running subtotal is displayed on the entry line as you enter your calculation, it actually works very naturally. Try it.

Advanced operations generally take precedence over standard operations, and can modify the second number before it is applied to the subtotal: functions, finance, trigonometry, and percent (%).

Examples:     $2 + 3 N! \quad \Rightarrow 2 + 6 \quad \Rightarrow 8$   
                   $6 * 50 \% \quad \Rightarrow 6 * .5 \quad \Rightarrow 3$

## Tenkey Syntax

This help topic assumes that you are not currently using a standard or scientific calculator (i.e., familiar with infix or RPN syntax). If you are, you may find the following discussion somewhat confusing (some of your underlying assumptions may be incorrect). Generally, once you become fluent in a given syntax, there is little to be gained from switching to a new one.

Basically, a tenkey assumes that you are adding a series of numbers. Consequently, the fundamental operation consists of entering numbers and their signs, which the application will sum:

- 1) Enter number.
- 2) Enter its sign.
- 3) Repeat steps 1 and 2 as desired.

Examples:    2+ 3+        => 5  
              2- 3+        => 1  
              2+ 3+ 4-     => 1

A tenkey keeps the last number you entered in its *cache*; if you enter another operator without explicitly typing a new number, the tenkey will use the contents of the cache.

Examples:    2+ + +        => 4+ 2+        => 6  
              2+ 3+ +     => 5+ 3+        => 8

Note: Only numbers you enter which are followed by a '+' or a '-' get placed into the cache.

Multiplication and division are treated as a sub-calculation within this running sum, and numbers are assumed positive (you can use a negative number within a sub-calculation by using the '+/-' key). When you have finished your sub-calculation, make sure to press the '=' key before trying to incorporate this subtotal into your running sum.

Examples:    2\*3=            => 6  
              5+ 2\*3= +    => 5+ 6+        => 11

Advanced operations generally take precedence over standard operations, and can modify the second number before it is applied to the subtotal: functions, finance, trigonometry, and percent (%).

Examples:    2+ 3N!+        => 2+ 6+        => 8  
              6 \* 2r =     => 6 \* .5        => 3

Judy's TenKey provides special handling for the percent (%) operator. If you press the '+' key after calculating a percentage, Judy's TenKey will add the calculated percent to the original number ('+%'). Also works with the '-' key ('-%').

Example: "40\*50%+" => 40+20 =>60  
(40\*50%=20; 40+50%=40+20=60)



## Reverse Polish Notation (RPN) Syntax

This help topic assumes that you are not currently using an adding machine or standard calculator (i.e., familiar with tenkey or infix syntax). If you are, you may find the following discussion somewhat confusing (some of your underlying assumptions may be incorrect). Generally, once you become fluent in a given syntax, there is little to be gained from switching to a new one.

Basically, RPN syntax requires you to enter 2 numbers followed by an operator (e.g., 2,3,+). To let Judy's TenKey know that you have finished entering the first number, press the  $\langle \Rightarrow \rangle$  button or the  $\langle \text{Enter} \rangle$  key. Then enter the second number, and select the desired operator. RPN syntax can be summarized as follows:

- 1) Enter number.
- 2) Press the  $\langle \Rightarrow \rangle$  button or the  $\langle \text{Enter} \rangle$  key.
- 3) Enter another number.
- 4) Choose an operation.
- 5) Repeat steps 3 and 4 as desired.

Examples:      $2 = 3 + \quad \Rightarrow 5$   
                   $2 = 3 - \quad \Rightarrow -1$   
                   $2 = 3 * \quad \Rightarrow 6$   
                   $2 = 3 * 5 + \quad \Rightarrow 6 = 5 + \quad \Rightarrow 11$

You may create more complex expressions by using the  $\langle \text{Enter} \rangle$  key to hold certain numbers in reserve while you focus on a more immediate subcalculation. Commonly, numbers held in reserve are said to be on the "stack", and get "popped" off the stack on a first-in, last-out basis. Most scientific calculators give you a stack that can hold 3 to 5 numbers; Judy's TenKey allows you to place as many numbers on the stack as you want.

Examples:      $2 = 3 = 4 + - \quad \Rightarrow 2 - (3 + 4) \quad \Rightarrow -5$   
                   $2 = 3 + = 4 = 5 + * \quad \Rightarrow (2 + 3) * (4 + 5) \quad \Rightarrow 45$

Advanced operations generally take precedence over standard operations, and can modify the second number before it is applied to the subtotal: functions, finance, trigonometry, and percent (%).

Examples:      $2 = 3 N! + \quad \Rightarrow 2 + 6 \quad \Rightarrow 8$   
                   $6 = 2 r * \quad \Rightarrow 6 * .5 \quad \Rightarrow 3$

## **Always On Top**

The "Always On Top" option of the "Configure" menu allows you to keep Judy's TenKey on top of all other windows (in other words, prevent any other window from covering it). This menu option is also available from the window's system menu, so you can directly adjust it even when the program is iconified.

"Always On Top" can be quite useful when working on large documents or spreadsheets. It allows you to fill most of your screen with your document, yet still have access to your TenKey without having to hunt for it.

Note: Some older screen savers will not cover Judy's TenKey when this setting is enabled.

## Red Negatives

The "Negatives Red" option of the "Configure" menu allows you to control whether negative numbers appear in red on the history tape. Negative numbers are those preceded by a '-' (e.g., "-23.25").

When using tenkey syntax, numbers followed by a '-' are also shown in red (e.g., "23.25 -").

## Scientific Notation

Numbers of the format N.MMMMe+XX are said to be expressed in scientific notation (for example, 1.23e+45). The digits following the 'e' represent 10 raised to the XX power (for example, 3.45e-4 represents  $3.45 \times 0.0001$  or  $0.000345$ ).

You can enter numbers in scientific notation whenever you like (by pressing the <e> key on your keyboard at the appropriate time), and Judy's TenKey will always express very large or very small numbers this way.

The "Scientific Notation" option of the "Configure" menu allows you to control whether *all* numbers are expressed in scientific notation (note that automatic decimal insertion functions differently when in scientific notation mode).

## **International Number Formats**

Judy's TenKey supports Microsoft Windows international number formats. If you wish to change the character that Judy's TenKey uses as the thousands separator or the decimal point, use the International icon within the Windows Control Panel.

To make things as easy as possible, Judy's TenKey always interprets the number pad period (".") as a decimal point when you enter numbers from the keyboard.

## **Saving Your Configuration**

You can save any changes you have made to your configuration so that the next time you run Judy's TenKey it remembers and uses your preferences. Saving your configuration records:

Visible Components

Decimals Setting

Syntax

Red Negatives

Always On Top

Screen Position

To save your configuration, select the "Save Settings" option from the "Configure" menu.

Alternately, you can have Judy's TenKey automatically save any setting changes by selecting the "Save Settings on Exit" option from the "Configure" menu.

## Registration Benefits

If you have not purchased your copy of Judy's TenKey, you must pay a registration fee to continue using it after the 30 day evaluation period. Registration provides the following benefits:

**Free Copy of Judy's Countdown™:** You will receive a free copy of Judy's Countdown to help you track important dates.

**32-Bit Version:** Registered users receive both 16-bit (runs on any version of Windows equal to or better than 3.1) and 32-bit versions of the program (more efficient for newer operating systems such as Windows NT or Windows '95).

**Update Notification & Discount:** You will receive timely notifications of new version releases, and will qualify for a reduced upgrade fee.

**Discount on Judy's Conversions:** You can order a copy of Judy's Conversions at the same time for a reduced price..

**Support:** Any questions you may have about the use of Judy's TenKey will be answered for a period of at least one year. You can contact us via email (support@JudysApps.com), or U.S. mail (see Registration Procedure for our address). If you encounter a serious problem using Judy's TenKey within 3 months of registration, we will either fix the problem or refund your registration fee. Judy's TenKey has been produced by a member of the Association of Shareware Professionals, entitling you to their support in problem resolution.

**Peace Of Mind:** You will be able to sleep at night knowing that you have acted ethically. If you wish to encourage the continued development of low-priced shareware, you must do your part to support it. A great deal of work has gone into the creation of this program, and the requested registration fee is quite modest.

If you purchased your copy through a retail distributor (such as *CompUSA*), you may register your copy at no additional cost, but you will not receive a copy of Judy's Countdown. You will be notified of new version releases, and be eligible for reduced fee upgrades.

See also Registration Procedure.

## Registration Procedure

Judy's TenKey™ is distributed via retail channels and via copyrighted shareware. If you have not purchased your copy of the program directly, you must register to continue using it after the 30 day evaluation period. If you have purchased your copy directly, you should register (at no charge, of course) to make sure you receive timely notification of new releases. See also [Registration Benefits](#).

Judy's TenKey costs \$19.95 plus \$2.95 shipping and handling (CA residents please add 8.25% sales tax; retail customers send no money at all). Volume and site licenses are available.

When you order a copy of Judy's TenKey, you are also eligible to order a copy of [Judy's Conversions](#) at over 50% off!

Register via [postal mail](#)

Register via [Web](#)

Register via [electronic mail](#)

Register via [telephone](#)

Register via [fax](#)

If you choose not to register your copy, please [uninstall](#) Judy's TenKey from your system.



## **Register via Postal Mail**

Send your name, address, and check or money order for \$19.95 plus \$2.95 shipping and handling (CA residents please add 8.25% sales tax) to:

Judy's Applications  
2464 El Camino Real, Suite #125  
Santa Clara, CA 95051  
USA

Don't forget to add an extra \$4.95 (plus any CA tax) if you want your reduced-price copy of Judy's Conversions!

For your convenience, you can print a registration form directly from Judy's TenKey using the "Configure | Register" menu option. If you do not have a printer, feel free to send us a handwritten note instead. Just remember to send us your name and your address!

Please note that we cannot accept credit card registrations through the mail. If you want to use a credit card, please register using any of these other methods: Web, telephone, email, or fax.

See also Registration Benefits.

## **Register via Web**

Use your Internet browser to go to:

[www.JudysApps.com](http://www.JudysApps.com)

Click on the "Order Now" link, and follow the instructions.

See also registration by: postal mail, telephone, fax, and email.

See also Registration Benefits.

## Register via Electronic Mail

Send your name, address, and credit card information (type, number, expiration date, and name on credit card) to:

8078@pslweb.com

Make sure you say you are ordering Judy's TenKey!

And don't forget to ask for your reduced-price copy of Judy's Conversions!

*Please be aware that these email address is for registrations only . . . the operator cannot answer any questions concerning the technical operation of the program (see Technical Support).*

Internet email is not secure; you may wish to consider using another registration method if possible. See also registration by: postal mail, Web, telephone, and fax.

See also Registration Benefits.

## **Register via Telephone**

Within the United States and Canada, call 1-800-242-4775.

Elsewhere, call (USA) 713-524-6394.

Make sure you say you are ordering Judy's TenKey!

And don't forget to ask for your reduced-price copy of Judy's Conversions!

*Please be aware that these numbers are for registrations only . . . the operator cannot answer any questions concerning the technical operation of the program (see Technical Support).*

See also registration by: postal mail, Web, email, and fax.

See also Registration Benefits.

## Register via Fax

Send your name, address, and credit card information (type, number, expiration date, and name on credit card) to:

(USA) 713-524-6398

Make sure you say you are ordering Judy's TenKey!

*Please be aware that this fax number is for registrations only . . . the operator cannot answer any questions concerning the technical operation of the program (see Technical Support).*

See also registration by: postal mail, Web, telephone, and email.

See also Registration Benefits.

## **Credit Cards**

We accept Visa, Mastercard, American Express, and Discover.

You can use your credit card when registering by: Web, telephone, fax, and email.

## **Evaluation Period Over**

Judy's TenKey gradually warns you that your evaluation period is ending, and finally prevents the program from running. If you decide you like the program, you should have plenty of time to order and receive a registered copy before the evaluation copy stops operating.

## **Evaluation Period Too Short or Non-Existent**

If you get a premature message that your evaluation period is over, make sure you have installed the program according to instructions. You **MUST** use the installation program, for both this reason and a host of other operating system issues.

## **Registered Copy Complaining About Evaluation Period**

If you own a registered copy of Judy's TenKey, and it starts complaining about an expired evaluation period, make sure you have installed the program according to instructions. You **MUST** use the default user name suggested by the installation program, or the installation program will think another user wants to evaluate the program, and install an evaluation copy.

Contact [support@JudysApps.com](mailto:support@JudysApps.com) if you need further assistance.

## Registration Dialog Box

The Registration Dialog Box is available from the "Configure | Register" menu option. It summarizes registration instructions and provides access to additional information via the following buttons:

<b>Button</b>	<b>Description</b>
Print Form...	Prints a registration form which you can fill out and <u>mail</u> to Judy's Applications.
Telephone Orders...	Gives you the <u>toll-free telephone number</u> for registering your copy of Judy's TenKey.
Internet...	Gives you the World Wide Web address for Judy's Applications (www.JudysApps.com).
Other Methods...	Brings up the help topic which describes the <u>registration process</u> , including alternate ways to contact Judy's Applications.
Registration Benefits...	Brings up the help topic which explains the <u>benefits</u> and the requirement for registering your copy of Judy's TenKey.



## **Association of Shareware Professionals (ASP)**

This program is produced by a member of the Association of Shareware Professionals (ASP). ASP wants to make sure that the shareware principle works for you. If you are unable to resolve a shareware-related problem with an ASP member by contacting the member directly, ASP may be able to help. The ASP Ombudsman can help you resolve a dispute or problem with an ASP member, but does not provide technical support for members' products. Please write to the ASP Ombudsman at 545 Grover Road, Muskegon, MI 49442 or send a CompuServe message via CompuServe Mail to ASP Ombudsman 70007,3536.

## Installing Judy's TenKey

To install Judy's TenKey, run "install.exe" from within Windows. See also [Network Installation](#).

- 1) Press the <Install> button.
- 2) Enter your name in the "Your Name" field (for example, "John Smith").
- 4) Enter the directory where you would like to install Judy's TenKey (C:\Program Files\TenKey by default). Judy's TenKey will create it if necessary.
- 5) Optionally set your preferred syntax (you can change this later if you are unsure).
- 6) Optionally set Judy's TenKey to start every time you start Windows. You can later undo this choice by removing Judy's TenKey from the Startup group.
- 7) Press the <OK> button.

You *must* use the installation program that comes with Judy's TenKey to install your copy, or your installation will not be licensed and you will eventually receive warning messages whenever you start the program.

Network users should *not* each run the installation program; the installation program should be run only once per site. Individual network users can simply begin using the program as they would any other shared program (to create an icon for Judy's TenKey, simply drag the "tenkey.exe" file to an appropriate place for a shortcut).

See also [Program Files](#) and [Replacing the Default Windows Calculator](#).

## **Network Installation**

To install Judy's TenKey on a network, your system administrator should install Judy's TenKey following normal installation procedures.

Individual users do *not* need to run the installation program.

Each user should access Judy's TenKey the same way they access other shared applications. For example, a networked user could create an icon for Judy's TenKey by simply dragging the "tenkey.exe" file icon to an appropriate place for a shortcut. Configuration settings for individual users are stored in their local Windows directory, in accordance with Microsoft Windows standards.

## **Uninstalling Judy's TenKey**

Users of the latest versions of Windows can uninstall Judy's TenKey by using the Add/Remove Programs icon from within the Windows Control Panel.

Windows 3.1 users can use the "Uninstall" program found within the "Judy's Applications" group.

## Program Files

The following files are required for Judy's TenKey operation:

<b>File</b>	<b>Purpose</b>
tenkey.exe	The main executable program file.
tenkey.hlp	The help file. Must be located in the same directory as the executable file.
tenkey.ini	The initialization file (stores your configuration settings). Must be located in the Windows directory.
tenkey.lic	The license file. Must be located in the same directory as the executable file.
tenkey.tip	Contains "Tip of the Day" information. Must be located in the same directory as the executable file.
tkttutor.exe	Interactive tutorial demonstration program. Must be located in the same directory as the main tenkey.exe.

Do not attempt to move or rename these necessary program files unless you are an experienced Windows user.

### Moving Program Files

If you move the location of the main program files, remember that the "ini" file must remain in the Windows directory, and the others must remain together.

The installation program looks in your "win.ini" file to find the location of the TenKey files (for uninstalling). If you move the files, you may want to update the TenKey section in your "win.ini" file to contain the new location of your TenKey files.

```
win.ini file  
[TenKey]  
Path=C:\Program Files\TenKey
```

### Renaming Program Files

You may also rename the TenKey program files, but you must rename them all to match (but **do not** rename tkttutor.exe!). For example, you could change their names to: "calc.exe", "calc.hlp", "calc.ini", "calc.lic", and "calc.tip".

You must also place an additional setting in the TenKey section of the win.ini file for the tutorial program to function.

```
win.ini file
```

[TenKey]  
Program Base File Name=calc

Note that if you rename the files, the installation program will no longer be able to find them to uninstall them.

See also [Replacing the Default Windows Calculator](#).

## Replacing the Default Windows Calculator

Some programs automatically utilize the default Windows calculator. If you would like them to use Judy's TenKey instead, simply:

- 1) Remove the existing calc.exe and calc.hlp files from the Windows directory (you may want to rename them to wincalc.exe and wincalc.hlp for later reference).
- 2) Copy the files tenkey.exe, tenkey.hlp, tenkey.lic, and tenkey.tip from the directory where you installed Judy's TenKey.
- 3) Rename the files to calc.exe, calc.hlp, calc.lic, and calc.tip.
- 4) Copy the file tktutor.exe to the same directory, but *do not* rename it.

This procedure works with most Windows programs. See also [Program Files](#).

## Starting Judy's TenKey

Normally you start Judy's TenKey by selecting its icon from the Start menu (Start | Programs | Judy's Applications | TenKey")

To automatically open the same tape file every time you start Judy's TenKey (so you can automatically pick up where you left off, for example), pass the complete name of the tape file as an argument on the command line.

Example: "C:\TENKEY\TENKEY.EXE C:\DATA\TAPE.TK"



## Command Line

Judy's TenKey accepts the name of a tape file as a command line argument.

Example: "C:\TENKEY\TENKEY.EXE C:\DATA\TAPE.TK"

You can also mimic a command line argument from within Windows:

**Windows 3.1 or NT 3.51:** In the Program Manager, use the "File | Properties" menu option of the TenKey icon to edit the command line

**Windows 95 or NT 4.0:** Right-click on the TenKey icon and select the "Properties" menu option. Select the "Shortcut" tab, and enter the tape file name after the program name on the "Target" line.

## Example Operations

Performing basic operations (e.g., +, -, \*, /) differs according to your selected [syntax](#):

[Calculator Syntax](#)

[Tenkey Syntax](#)

[RPN Syntax](#)

See also [Buttons & Keyboard](#).

## **Incorrect Help Link Colors**

When using the 16-bit version of Judy's TenKey on a 32-bit operating system (such as Windows NT 4.0), Windows does not always correctly display the help link colors if your system is set for more than 256 color display (from the Control Panel).

There are two ways to correct this problem:

- 1) Register and get a copy of the 32-bit program.
- 2) Or use a lower color setting in the Control Panel.

This is not a serious problem, and does not affect operation in any other way.

## Using Memory

Judy's TenKey allows you to save up to 10 numbers in memory for later recall and use. In general, you should:

- 1) Select the memory (0 - 9) you want by pressing the corresponding radio button (see [Display Components](#)).

**Hint:** You can use the keyboard to select the desired memory by holding down the <Alt> key and pressing the digit of the desired memory (e.g., Alt+3).

Note that the number of the current selection is displayed in the memory display box at the left of the memory buttons (e.g., "M3"). Also note that an "!" will appear in the memory display box if anything is currently stored in the chosen memory.

- 2) Press the memory button corresponding to the memory action you wish to take (e.g., store the current number by pressing the <MS> button).

For example, if you plan to multiply several items by the same factor, you may want to first enter the factor and then follow these instructions:

- 1) Optionally select a new memory radio button (or just use the current one).
- 2) Press <MS> to store the current number.
- 3) Enter your next calculation.
- 4) When appropriate, press <MR> to recall your number.
- 5) Continue with your calculation.

Pressing the <MS> button overwrites any previous contents of the currently selected memory. You can add to the contents of the memory by pressing the <M+> button, causing the current number displayed on the entry line to be added to the current contents of the memory. To subtract a number, press the <+/-> button to change the sign of the number on the entry line before pressing the <M+> button.

Normally, the memory buttons apply to the standard entry bar. However, if you are editing a tape entry, they will operate on that entry. For example, you can replace the value of a tape entry with the memory contents by double-clicking on the target entry number, then pressing the <MR> button.

See also [Memory Bar](#).

## Using The Tape

Judy's TenKey automatically records your calculations in a scrolling tape, which you can configure to be visible or invisible.

Clicking the right mouse button on a tape entry provides a pop-up menu of available actions for that entry (see also "Edit" Menu Commands").

<b>Category</b>	<b>Summary</b>
<u>File Operations</u>	Save tape contents to a file, open a previously saved tape, print the current tape, and more.
<u>Selecting Entries</u>	Highlight tape entries for copying, deleting, calculating statistics, modifying, or reusing.
<u>Editing Entries</u>	Change numbers, operations, or notes and recalculate your results.
<u>Copy &amp; Paste</u>	Copy selected tape entries to another application, paste data from another application, etc.
<u>Statistics</u>	Calculate statistics about selected tape entries such as sum and standard deviation.
<u>Reusing Entries</u>	Reuse tape entries in subsequent calculations.
<u>Resizing</u>	Change the visible length of the tape.

## Selecting Tape Entries

You can select tape entries for "Edit" operations, statistical calculations, or reuse. Selected entries appear highlighted.

### Using the Mouse:

To select a single entry, click the left mouse button when your cursor is over the desired entry.

To highlight several contiguous entries, hold the mouse button down and drag your cursor over the desired entries. Alternately, select the first entry normally, then hold the <Shift> key down when you select the last entry -- all entries in between the two will be selected.

To highlight several non-contiguous entries, select each additional entry while holding down the <Ctrl> key. Clicking (while holding down the <Ctrl> key) on an entry that has already been selected will cause it to become deselected.

### Using the Keyboard:

First, press the <Tab> key, causing the topmost visible tape entry to become selected.

Change your selection using the arrow keys or the page keys.

To select multiple, contiguous entries, hold down the <Shift> key while using the arrow or page keys.

You cannot select multiple, non-contiguous entries using only the keyboard.

You can select all tape entries via the "Edit | Select All" menu command. Alternately, you can deselect all tape entries via the "Edit | Deselect All" menu command. See also "Edit" Menu Commands.

See also Using The Tape.

## Editing Tape Entries

- 1) To change a line in the tape, either:
  - a) Double-click on the tape entry element (number, operator, or note) you wish to modify.
  - b) Or, click the right mouse button on the tape entry you wish to modify, then use the "Modify" pop-up menu option to choose the entry element.
  - c) Or, select the desired tape entry and use the "Edit | Modify" menu option to pick the element.
- 2) Enter the new value (number, operator, or note).
- 3) Judy's TenKey will automatically make any recalculations required by your changes. Note that the recalculation caused by tape edits is *not* the same as replaying your original keystrokes (see Notes on Tape Recalculation for details).

See also Inserting Tape Lines, Deleting Tape Lines, Adding Tape Notes, and Using The Tape.

## **Changing Tape Notes**

- 1) Enter the new text by typing.
- 2) Press the <Enter> key to commit your changes, or the <Escape> key to cancel them.

Note that any edits in progress are automatically committed if you begin editing another line, you close the tape, or you exit the application.



## Changing Tape Numbers

- 1) Enter the new number by typing, pressing the number pad buttons, or using the memory recall button.
- 2) Press the <Enter> key to commit your changes (causing the tape to recalculate), or the <Escape> key to cancel them.

Note that any edits in progress are automatically committed if you begin editing another line, you close the tape, or you exit the application.

## **Changing Tape Operators**

Enter the new operator by pressing the appropriate TenKey button or using its keyboard equivalent. The tape will be automatically recalculated.

To leave an operator unchanged that you have begun editing, do not enter a new operator and instead press the <Escape> key.

## **Adding Tape Notes**

- 1) To begin editing a tape note,
  - a) Select a tape line and use the "Edit | Modify | Note" menu option, or
  - b) Double-click on the left portion of the tape line (to the left of the number, if there is one).
- 2) Enter the note text by typing.
- 3) Press the <Enter> key to commit your changes, or the <Escape> key to cancel them.

See also Editing Tape Entries and Using The Tape.

## **Inserting Tape Lines**

- 1) Select a tape line.
- 2) To insert the new line above the selected line, either
  - a) Press <Insert> on your keyboard, or
  - b) Use the "Edit | Insert Line" menu option.

See also Deleting Tape Lines, Editing Tape Entries, and Using The Tape.

## Deleting Tape Lines

- 1) Select one or more tape lines.
- 2) To delete the selected lines, either
  - a) Press <Delete> on your keyboard, or
  - b) Use the "Edit | Delete" menu option.
- 3) Judy's TenKey will automatically make any recalculations required by your changes. Note that the recalculation caused by tape edits is *not* the same as replaying your original keystrokes (see Notes on Tape Recalculation for details).

See also Inserting Tape Lines, Editing Tape Entries, and Using The Tape.

## Notes on Tape Recalculation

Tape recalculation is *not* the same as replaying your keystrokes. When Judy's TenKey recalculates a tape because of an edit, it uses only information available from the tape (i.e., it does not remember and replay your original keystrokes).

This approach enables Judy's TenKey to export tape information to another application, read it back in, and recalculate the same answer. It also minimizes potential confusion because "what you see is what you get" (i.e., Judy's TenKey uses the entries as they appear, not as they were formed).

Example: Suppose you have the following tape (using calculator syntax):

```
2.00  +
3.00  =
5.00  T

5.00  +
1.00  =
6.00  T
```

Now suppose you edit the first line and change it from a 2 to a 1. Judy's TenKey will display the following recalculated tape:

```
1.00  +
3.00  =
4.00  T

5.00  +
1.00  =
6.00  T
```

Note that the first total changes from 5 to 4, but the second total remains unchanged. If Judy's TenKey replayed keystrokes, your edit might have caused the "5.00 +" line to change to "4.00 +" (if your original keystrokes were "1 + 3 = + 1") . . . or not (if your original keystrokes were "1 + 3 = 5 + 1 ="). It is to avoid such confusion that Judy's TenKey follows the "what you see is what you get policy".

## Quick Num

You can quickly place a number from the tape into the entry line by either:

- 1) Click the right mouse button on the number you wish to reuse, then select "Reuse Number" from the resultant pop-up menu.
- 2) Or, select the tape entry containing the desired number, then use the "Edit | Reuse Number" menu option.

You can then either use the number directly (for example, by pressing the "+" button), or modify it by pressing the backspace key.

## Using Financial Functions

Judy's TenKey supports advanced financial functions such as loan payment calculation, investment growth, retirement fund requirements, and more. See [Finance Bar](#) for details on individual financial functions.

In general, to use an advanced financial function:

- 1) Press the financial button that corresponds to the quantity you wish to calculate. For example, to calculate the payments on a loan, press the <Pmt> button.
- 2) Enter the requested information into the dialog box that appears. Note that interest rates are expressed using the '%' symbol (e.g., eight percent is expressed as '8%' or just '8').
- 3) Click on the <Calculate> button (or just press the <Return> key).

**Record on Tape:** Normally, every time you press the <Calculate> button, Judy's TenKey displays the financial result within the current dialog box, *and also appends the complete calculation to the tape*. This feature is quite powerful, and gives you the ability to easily review and compare several different financial scenarios.

You can temporarily disable this feature by unchecking the "Record on Tape" checkbox.

Note that the tape always lists the interest rate percentage as the second number, the duration as the second-to-last number, and the answer last.

**Calculation Target:** Some financial dialogs let you pick the element you wish to calculate (for example, the Loan dialog lets you calculate the total loan amount or the monthly payment). If a financial dialog supports this feature, you will see a radio button next to each element that can function as the calculation target. To pick a new calculation target, simply click on the radio button next to the name of the element you wish to calculate. Then enter the required information into the other fields, and press the <Calculate> button.



## Using the Clipboard

### To copy data to other applications,

- 1) Select the information you wish to copy.
- 2) Use the "Edit | Copy" command.
- 3) From the desired destination application, use the "Paste" command to insert your information.

*Tip: You can choose to copy subsets of the selected tape entries (only the numbers, for example) via the Special Edit Commands dialog.*

### To paste data from other applications, modifying your calculations,

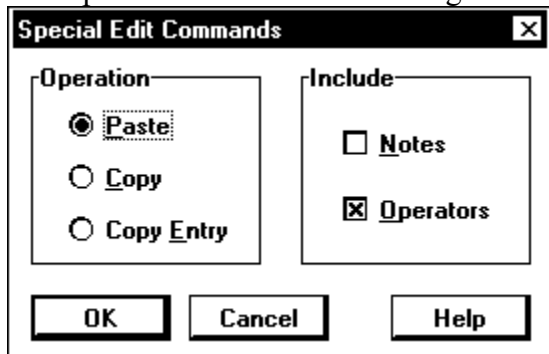
- 1) Place the desired information into the Windows clipboard (via another Windows program or even Judy's TenKey itself). Judy's TenKey uses heuristic reasoning to interpret the information you paste, so it is usually not necessary to strip out any extra text that may be intermingled with the numeric operations.
- 2) Optionally select a tape line as the insertion point (with no lines selected, the data will be appended to the bottom of the tape).
- 3) Use the "Edit | Paste" command to insert the data (see also Notes on Tape Recalculation).

*Tip: You can override the default "paste" behavior (pasting just numbers, for example) via the Special Edit Commands dialog.*

See also the "Use" command and the "Edit" menu.

## Special Edit Commands

The Special Edit Commands dialog box is available from the "Edit | Special" menu.



### To copy a subset of the selected tape entries to the clipboard,

- 1) Select the "Copy" operation.
- 2) Check only the optional components you wish to include:
  - a) Notes
  - b) Operators (+, -, etc.).
- 3) Press <OK>.

### To copy just the number in the entry line,

- 1) Select the "Copy Entry" operation.
- 2) Press <OK>.

*Tip: If no tape lines are selected, you can use the <Ctrl+C> keyboard shortcut to accomplish the same thing without having to use this dialog box.*

### To override the default "paste" behavior,

- 1) Select the "Paste" operation.
- 2) Check the optional components you wish to include:
  - a) Notes
  - b) Operators (+, -, etc.).

*Tip: If the data is coming from the TenKey itself, all components will be selected by default. If the data is from an external application, notes will not be selected by default.*

- 3) Press <OK>.

See also the "[Using the Clipboard.](#)"

## The "Use" Command

Judy's TenKey enables you to "reuse" information in the history tape or the Windows clipboard as input for your current calculations. This capability can substantially reduce the amount of typing you do, saving time and minimizing the possibility of typing errors.

Note that reusing tape entries is *not* the same as replaying your original keystrokes (see Notes on Tape Entry Reuse for details).

### Reusing Tape Entries:

Frequently there are parts of a calculation that you wish to reuse in subsequent calculations. Simply select the tape entries you wish to reuse, then press the <Use> button whenever you want to reuse them (Judy's TenKey keeps your selected entries highlighted until you select other entries).

See also Quick Num.

### Using Clipboard Contents:

To use information in the clipboard as input for your current calculation, make sure all tape lines are deselected (to avoid inserting the data in a previous location), then use the "Edit | Paste" menu option.

## Notes on Tape Entry Reuse

It is important to remember that tape entry reuse is *not* the same as replaying your keystrokes. When Judy's TenKey reuses tape entries, it uses only information available from the tape (i.e., it does not remember and replay your original keystrokes).

This approach enables Judy's TenKey to export tape informationUsingTheClipboard to another application, read it back in, and recalculate the same answer. It also minimizes potential confusion because "what you see is what you get" (i.e., Judy's TenKey uses the entries as they appear, not as they were formed).

Example: Suppose you have the following tape (using calculator syntax):

```
2.00  +
2.00  +
4.00  =
8.00  T
```

Now suppose you type "4 +" and then reuse the above tape entries, causing a second series of tape entries to appear:

```
4.00  +
2.00  +
2.00  +
4.00  =
12.00 T
```

Note that the reused lines look identical, except for the total (which is always recalculated). If Judy's TenKey replayed your keystrokes, the reused lines might have totaled 24 (if your original keystrokes were "2 + + ="), or 16 (if your original keystrokes were "2 + + 4 ="), or 12 (if your original keystrokes were "2 + 2 + 4 ="). It is to avoid such confusion that Judy's TenKey follows the "what you see is what you get policy".

## Menu Commands

Menu commands can be accessed via the mouse or the keyboard.

<b>Option</b>	<b>Purpose</b>
<u>File</u>	Print, save, and restore history tapes.
<u>Edit</u>	Cut, copy, and paste numbers between applications; modify the tape.
<u>Configure</u>	Customize your TenKey's appearance and operation.
<u>Help</u>	Access this help system.

## "File" Menu Commands

These commands control history tape files (see also [Using the Tape](#)):

<b>Command</b>	<b>Accelerator</b>	<b>Function</b>
New	Ctrl+N	Replace the current tape with a new blank one (and start a new calculation).
<u>O</u> pen		Replace the current tape with a previously saved one (and start a new calculation).
Clear	Ctrl+L	Erase the contents of the current tape (and start a new calculation). Does not affect the saved file until you explicitly save the new version.
Save	Ctrl+S	Store the current contents of the history tape into a file, overwriting any previous contents. If the tape has never been saved, Judy's TenKey will prompt you for a file name.
Save As		Store the current contents of the history tape into a new file. Enter the desired file name in the dialog box that appears; use standard DOS file naming conventions (i.e., an optional path plus at most 8 characters with a 3 character extension).
<u>P</u> rint	Ctrl+P	Print the contents of the current tape.
Exit		Close Judy's TenKey. The fate of the history tape is determined by the " <a href="#">Tape Close Behavior</a> " configuration setting.

## Print Command

You can print a tape using the "Print" command available from the "File" menu (or simply press Ctrl+P).

To print just a portion of the tape (the entire tape is printed by default):

- 1) Highlight the portion of the tape you wish to print.
- 2) Select the "File | Print" menu command . . . a standard print dialog box will appear.
- 3) Within the "Print Range" area of the print dialog box, choose "Selection" and press "OK".

To print a tape to a file:

- 1) Follow the normal steps for printing a tape, but before pressing "OK" in the print dialog box, select the "Print to File" checkbox. Now press "OK".
- 2) In the "Print to File" dialog box which appears, enter the name of the file to which you wish to print, and press "OK".

Note that this file will contain printer commands, and will not be readable by a normal text editor. One way to print this file is to use the command: "`copy /b filename lpt1:`", where *filename* is the name you entered in step <2>, and *lpt1:* is the name of your printer port.

## **Open Command**

You can open a previously saved tape (or a foreign format file) using the "Open" command available from the "File" menu.

The open command brings up the standard Windows File Open dialog box. Either type the name of the desired file into the File Name field, or select one from the list immediately below the File Name field. You can enter path information into the File Name field, or navigate to a different directory by double-clicking on the various directories listed to the right.

If you wish to open a non-TenKey file, simply enter its name and Judy's TenKey will attempt to read it using the same intelligent text interpretation algorithms it uses for copy & paste.

See also [automatic open](#).



## "Edit" Menu Commands

These commands enable you to copy and paste information between Judy's TenKey and other Windows applications (see also [Using The Clipboard](#)); they also enable you to modify existing tape entries.

<b>Command</b>	<b>Accelerator</b>	<b>Function</b>
Cut	Ctrl+X	Deletes any selected tape entries (causing the tape to <u>recalculate</u> ) and places them in the Windows clipboard.
Copy	Ctrl+C	Copies any selected tape entries to the Windows clipboard. Note that if no tape lines are selected, it copies the contents of the main entry line to the clipboard (this command is also always available under the " <u>Edit   Special</u> " menu option).
Paste	Ctrl+V	Inserts clipboard contents into the tape above the first selected tape line, causing it to automatically recalculate. If no tape lines are selected, it appends the data to the bottom of the tape.
Delete	Del	Deletes any selected tape entries (causing the tape to <u>recalculate</u> ).
<u>Special</u>		Dialog box for less common copy & paste functions.
Insert Line	Ins	Inserts a blank line above the first selected tape entry (having no effect on the calculation). If no entries are selected, it appends the line to the bottom of the tape.
<u>Reuse Number</u>		Puts a copy of the highlighted tape entry number into the entry line.
<u>Reuse Lines</u>	U	Uses the highlighted tape entries as input to the current calculation.
<u>Modify</u>		Submenu enabling you to modify a portion of a selected tape entry.
Deselect All	Ctrl+D	Deselects all tape entries.
Select All	Ctrl+/	Selects all tape entries.

## "Edit | Modify" Menu Commands

These commands are available via the "Modify" option of the "Edit" menu (as well as the right mouse menu pop-up for tape entries).

In general, these commands enable you to specify which portion of the selected entry you wish to edit. See also Editing Tape Entries.

<b>Command</b>	<b>Function</b>
Number	Allows you to edit the number of the selected tape line, causing the tape to recalculate as needed. Press <Enter> when you are done, or <Escape> to cancel.
Operator	Allows you to edit the operator (e.g., +,-) of the selected tape line, causing the tape to recalculate as needed.
Note	Allows you to edit the free text note associated with the selected tape line.
Make Break	Changes the selected line to a <u>break line</u> .

## Tape Break Lines

A break line in the tape appears as a blank line, but it acts as an impenetrable barrier. Calculations above the line have no effect on calculations below the line. Inserting a break line is the same as starting a completely new calculation.

When you press the "Clear" button or the <Escape> key, the current calculation is halted and a break line is appended to the tape.

If you wish to insert a break line into an existing tape,

- 1) Select the line after the desired break.
- 2) Use the "Edit | Insert Line" command to insert a blank line.
- 3) Use the "Edit | Modify | Make Break" menu command to change the blank line into a break line.

## Tape Number Lines

If a number in the tape has no associated operator (e.g., +, -, \*, ...), then Judy's TenKey displays the default '#' operator and colors the line golden to remind you that the number is not being used in the current calculation (other than perhaps for statistical calculations driven by the current tape selection).

Such *number lines* are created when:

- 1) You enter the '#' symbol from the keyboard rather than a normal calculation operator.
- 2) You edit the number of a previously blank line.
- 3) You use the "Edit | Special" menu to paste only numbers.

To transform a number line into a normal tape line that contributes to the calculation, edit the operator field and type over the '#' symbol with the desired operator.

## "Configure" Menu Commands

These commands allow you to customize your TenKey's appearance and functionality.

<b>Command</b>	<b>Accelerator</b>	<b>Function</b>
<u>Components</u>		Specify the TenKey elements you want displayed (number pad, history tape, etc.).
<u>Decimals</u>		Set the number of digits past the decimal point that Judy's TenKey displays, and control automatic decimal insertion.
<u>Syntax</u>		Choose how you want Judy's TenKey to interpret your input (calculator, tenkey, or scientific mode).
<u>Keyboard</u>		Lets you assign the function of the <Enter> key.
<u>Negatives Red</u>		Toggle whether Judy's TenKey records negative numbers in red.
<u>Scientific Notation</u>		Toggle whether Judy's TenKey shows all numbers in exponent format (1.234e+56).
<u>Always On Top</u>	Ctrl+T	Toggle whether Judy's TenKey allows other windows to cover it.
<u>Tip of the Day</u>		Toggle whether Judy's TenKey displays a helpful tip when starting up.
<u>Register</u>		Read instructions for registering your copy of Judy's TenKey™. Judy's TenKey is provided as copyrighted © shareware, which means that if you decide you like the program and you wish to continue using it, you must pay a small licensing fee.
<u>Save Settings</u>	Ctrl+W	Record the configuration settings you have made, so that Judy's TenKey will use them next time you run the program.
<u>Save Settings On Exit</u>		Automatically record the configuration settings in place whenever you exit the program, so that Judy's TenKey will use them next time you run the program.

## Keyboard Configuration

You can modify the functionality of your computer keyboard by using the Keyboard Configuration dialog (available from the "Configure | Keyboard" menu option).

**To swap the functionality of the <Enter> key and the <+> key** to more closely mimic the physical keyboard layout of a desktop tenkey, click the "*Swap <Enter> and <+> keys*" radio button and press <OK>.

**To assign the functionality of the <Enter> key without affecting the <+> key**, click the "Assign <Enter> key functionality" radio button, then click the radio button corresponding to the value you want, and then press <OK>.

Note that these changes affect the keyboard only for your Judy's TenKey application.

Remember to save your configuration!

## **Tip of the Day**

Judy's TenKey displays a helpful tip every time you start the program. You can page through the available tips using the <Next> and <Prev> buttons in the "Tips" dialog box. If you want more information about a given tip, try searching the help system with keywords from the tip.

**To disable this feature**, either:

- 1) In the "Tips" dialog box, uncheck the "Show tips at startup" checkbox.
- 2) Or, use the "Configure | Tip of the Day" menu option.

**To later re-enable this feature**, use the "Configure | Tip of the Day" menu option.

## "Decimals" Menu Commands

These commands are available from the "Decimal" option of the "Configure" menu, and allow you to customize the way Judy's TenKey deals with decimals.

<b>Command</b>	<b>Function</b>
<u>Number</u>	Set the number of digits past the decimal point that Judy's TenKey displays.
<u>Auto Insert</u>	Have Judy's TenKey automatically insert decimal points in your numbers as you type them.

See also International Number Formats.



## "Help" Menu Commands

These commands focus the help system on the selected topic:

<b>Command</b>	<b>Topic Description</b>
<u>Contents</u>	Top level outline for help system topics.
Search for Help on	Brings up dialog that allows you to search help system for specific keywords.
<u>Registration</u>	<u>RegistrationProcedure</u> How to register your copy of Judy's TenKey in order to receive a free copy of Judy's Countdown.
About	Displays the program version number and the owner of this copy.

## Buttons & Keyboard

You can always use the keyboard to access any capability supported by Judy's TenKey, regardless of whether the buttons that control that capability are visible on the screen.

<u>Component</u>	<u>Topic Description</u>
<u>Function Bar</u>	Advanced mathematical calculations.
<u>Finance Bar</u>	Common financial analyses. Uses capital letters for keyboard access.
<u>History Tape</u>	Tape manipulation using the keyboard.
<u>Memory Bar</u>	Store up to 10 numbers for later recall and use. Uses capital letters for keyboard access.
<u>Menu Bar</u>	Menu selection via the keyboard.
<u>Number Pad</u>	Enter numbers; perform basic mathematical operations.
<u>Statistics Bar</u>	Calculate statistics of selected tape entries.
<u>Trigonometry Bar</u>	Trigonometric functions. Uses Alt+key combinations for keyboard access.

Common keyboard commands have been chosen to allow you to operate very efficiently using only one hand (centered on the number pad of your keyboard). An exception to this rule is the Clear command, which is a drastic action and is therefore located at the opposite side of the keyboard.

## Menu Bar

At the top of the TenKey window is a basic menu bar that provides access to the menu commands. You can access this menu bar using the mouse or the keyboard.

### Keyboard Access:

Press the <Alt> key to access the menu bar. Use the arrow keys to navigate through the menu choices. Alternately, you can skip directly to your desired choice by typing the letter that appears underlined in that choice. Press the <Enter> key to activate a choice that you have highlighted.

### Keyboard Accelerators:

Some menu functions provide keyboard accelerators (usually listed beside the menu choice) which enable you to activate menu functionality without first activating the menu. Keyboard accelerators often require you to press two keys simultaneously (e.g., Ctrl+X). If an accelerator requires two keys, we recommend that you press and hold the modifier key (i.e., Ctrl, Shift, or Alt), then press the other key specified. See also the "File" and "Edit" menus.

## Memory Bar

Allows you to save up to 10 numbers for later use. The top row of the memory bar graphically represents the 10 memories, numbered from 0 - 9. You can select a memory by clicking the mouse in the corresponding radio button, or you can use the keyboard by holding down the <Alt> key and pressing the digit of the desired memory (e.g., Alt+3).

The memory status window, located to the far left of the memory bar, shows the number of the currently selected memory (e.g., "M3"), and appends a "!" if the selected memory has been set (e.g., "M3!").

<b>Button</b>	<b>Key</b>	<b>Function</b>
MS	Shift-S	<u>Memory Store</u> . Places a copy of the number currently displayed in the <u>active entry</u> into memory, causing an "!" to appear in the memory status window.
MR	Shift-R	<u>Memory Recall</u> . Places a copy of the memory contents into the <u>active entry</u> , replacing whatever was previously displayed there.
MC	Shift-C	<u>Memory Clear</u> . Removes any number stored in memory.
M+	Shift-A	<u>Memory Add</u> . Adds number currently displayed in the <u>active entry</u> to contents of memory.

See also Using Memory.

## **The Active Entry**

The **active entry** is normally the main entry line. However, while you are editing a tape entry, that tape entry is the **active entry**.

## **Keyboard Manipulation of the Tape**

To manipulate the tape using the keyboard, first press the <Tab> key to select the topmost visible tape entry.

To then scroll the tape, use the arrow keys or the page keys.

See also [Selecting Tape Entries](#).

## Statistics Bar

Allows you to calculate statistics for selected tape entries. See also Display Components

Note that all statistics ignore blank lines, and that when u sing Tenkey Syntax, Judy's TenKey considers trailing operators (+,-) when calculating statistics.

<b>Button</b>	<b>Key</b>	<b>Function</b>
M <u>i</u> n	i	<u>Minimum</u> . Finds the smallest number in the selected lines.
M <u>a</u> x	a	<u>Maximum</u> . Finds the largest number in the selected lines.
S <u>u</u> m	m	<u>Sum</u> . Adds the numbers in the selected lines.
M <u>n</u>	n	<u>Mean (average)</u> . Adds the numbers in the selected lines and divides by the number of lines.
M <u>e</u> d	d	<u>Median</u> . Finds the line which lies at the numerical mid-point of the selected lines (half the selected lines are greater, half are less). If there are an even number of selected lines, it calculates the average of the middle two.
C <u>n</u> t	c	<u>Count</u> . Counts the number of lines selected.
M <u>o</u> de	o	<u>Mode</u> . Finds the number which most commonly appears in the selected lines. If there is a tie, it returns the smallest of the tying numbers.
G <u>m</u> n	g	<u>Geometric Mean</u> . Takes the nth root of the product of the selected entries, where n is the number of entries.
D <u>e</u> v	d	<u>Deviation</u> . Calculates the standard deviation of the highlighted numbers.
U <u>s</u> e	u	<u>Use</u> . Reuses the highlighted entries in the current calculation (does <i>not</i> ignore blank lines). See also the " <u>Use</u> " Command.

## Function Bar

The function bar provides advanced mathematical functionality. See also [Display Components](#).

Button	Key	Function
1/X	r	<u>Reciprocal</u> . Calculates the inverse of the number currently displayed on the entry line (i.e., 1 divided by the number). Example: "2r" => 0.5 (1/2 = 0.5).
X^Y	^	<u>Exponent</u> . Raises the first number to the power of the second number (i.e., multiplies the number by itself the number of times you specify). Example: "5^2=" => 25 (5*5=25). "5^3=" => 125 (5*5*5=125). <i>RPN Syntax:</i> When using RPN Syntax, follow standard multi-argument procedures (e.g., "5=2^" => 25).
Sqrt	q	<u>Square Root</u> . The square root of a number is defined to be that number which, when multiplied by itself, equals the starting number. Example: "9q" => 3 (3*3=9).
N!	f	<u>Factorial</u> : Calculates the factorial of the current entry (i.e., $N*(N-1)*(N-2)*...*1$ ). This function only works with whole numbers. Example: "4f" => 24 (4*3*2*1=24). "6f" => 720 (6*5*4*3*2*1=720).
Log	l	<u>Logarithm</u> . Calculates the base 10 logarithm of the current entry (works only with positive numbers). You can also calculate the <u>inverse</u> logarithm. Example: "100l" => 2 (10^2=100). "1000l" => 3 (10^3=1000).



## Trigonometry Bar

The trigonometry bar includes a row of standard buttons (sin, cos, tan, pi, ln), and another row of modifier settings (radians or degrees, inverse, hyperbolic) that affect the functionality of those buttons.

The following table describes the default behavior of the trigonometry buttons (assuming numbers expressed in degrees):

<b>Button</b>	<b>Key</b>	<b>Function</b>
Sin	Alt+s	<u>Sine</u> . Calculates the sine of the number in the entry line. Example: "90Sin" => 1
Cos	Alt+o	<u>Cosine</u> . Calculates the cosine of the number in the entry line. Example: "90Cos" => 0
Tan	Alt+t	<u>Tangent</u> . Calculates the sine divided by the cosine (sin/cos) of the entry line. Example: "45Tan" => 1
Pi	Alt+p	<u>Pi</u> . Places the value of pi in the entry line. This function is unaffected by any of the trigonometry modifier settings.
Ln	Alt+l	<u>Logarithm</u> . Calculates the natural logarithm of the current entry (works only with positive numbers). Example: "2.718Ln" => 1

## Trigonometry Modifiers

The Trigonometry Bar includes a row of modifier controls that affect the functionality of the standard trigonometry buttons.

The leftmost two radio buttons control the units for trigonometric functions. You must choose one or the other.

Button	Key	Function
Deg	Alt+d	<u>Degrees</u> . Tells Judy's TenKey that all trigonometric functions should be performed in degrees. Example: "90Sin" => 1
Rad	Alt+r	<u>Radians</u> . Tells Judy's TenKey that all trigonometric functions should be performed in radians. Example: "90Sin" => 0.894

The rightmost two check boxes modify the functionality of trigonometric functions. You can pick none, one, or both. As soon as you use an applicable trigonometric function, the check boxes reverts to their unchecked states.

Button	Key	Function
Inv	Alt+i	<u>Inverse</u> . Tells Judy's TenKey that the next trigonometric function should calculate its inverse (in other words, calculate the value that would have led to the number currently in the entry line). This function also applies to both <u>Ln</u> and <u>Log</u> . Example: "1ArcSin" => 90
Hyp	Alt+y	<u>Hyperbolic</u> . Tells Judy's TenKey that the next trigonometric function should perform the hyperbolic version. Example: "1Sinh" => 1.175

## Finance Bar

The finance bar supports the following functions (see also [Using Financial Functions](#)):

<b>Button</b>	<b>Key</b>	<b>Function</b>
<u>Loan</u>	Shift+l	<u>Loan</u> . Brings up a dialog to help you calculate the total loan amount you can afford, monthly payment, interest rate, or duration of the loan.
<u>Pmt</u>	Shift+p	<u>Payment</u> . Brings up the loan dialog, configured to help you calculate monthly payments for most loans.
<u>Inv</u>	Shift+i	<u>Investment</u> . Brings up a dialog to help you calculate the future value of your investment.
<u>Fund</u>	Shift+f	<u>Retirement Fund</u> . Brings up a dialog to help you calculate the money you will need to guarantee a certain level of income during your retirement.
<u>Dflt</u>	Shift+d	<u>Deflation</u> . Brings up a dialog to help you calculate the future value of your money in today's dollars (useful when evaluating the results of the Invest function, or deciding your desired monthly income for the Fund function).

## Loan Dialog

The Loan Dialog Box (available from the Finance Bar) can calculate the terms of most loans.

Target —  **L**oan Amount

**M**onthly Payment

**I**nterest Rate

**D**uration (Years)

**R**ecord on Tape

Simply select the parameter you wish to calculate (e.g., click on the words "Monthly Payment"), then fill in the other three parameters with your desired values. Press the <Calculate> button to see your answer.

A word of caution about precision of results...

### Specific calculations:

Total loan amount

Monthly payment

Annual interest rate

Duration of loan (in years)

See also Using Financial Functions.

## **Calculating Total Loan Amount**

To calculate the total amount of a loan (from within the Loan dialog box):

- 1) Make sure that the "Loan Amount" target radio button is selected.
- 2) In the labeled fields, enter the monthly payment, the duration of the loan (in years), and the annual interest rate (in percent).
- 3) Press the <Calculate> button and read the result in the "Loan Amount" field.

For example, an \$805 monthly payment at a 9% annual interest rate for 30 years implies an original loan of \$100,000.

## Calculating Loan Payments

To calculate the monthly payment for a loan (from within the Loan dialog box):

- 1) Make sure that the "Monthly Payment" target radio button is selected.
- 2) In the labeled fields, enter the total loan amount, the duration of the loan (in years), and the annual interest rate (in percent).
- 3) Press the <Calculate> button and read the result in the "Monthly Payment" field.

For example, a \$100,000 loan at a 9% annual interest rate for 30 years requires a monthly payment of \$805.

## **Calculating Loan Interest Rate**

To calculate the annual interest rate for a loan (from within the Loan dialog box):

- 1) Make sure that the "Interest Rate" target radio button is selected.
- 2) In the labeled fields, enter the total loan amount, the monthly payment, and the duration of the loan (in years).
- 3) Press the <Calculate> button and read the result in the "Interest Rate" field.

For example, a \$100,000 loan with a monthly payment of \$805 for 30 years requires an interest rate of 9%.

## Calculating Loan Duration

To calculate the duration of a loan (from within the Loan dialog box):

- 1) Make sure that the "Duration (Years)" target radio button is selected.
- 2) In the labeled fields, enter the total loan amount, the monthly payment, and the annual interest rate.
- 3) Press the <Calculate> button and read the result in the "Duration (Years)" field.

For example, a \$100,000 loan with a monthly payment of \$805 at an annual interest rate of 9% will require a 30 year duration.



## **A Word of Caution Concerning Precision**

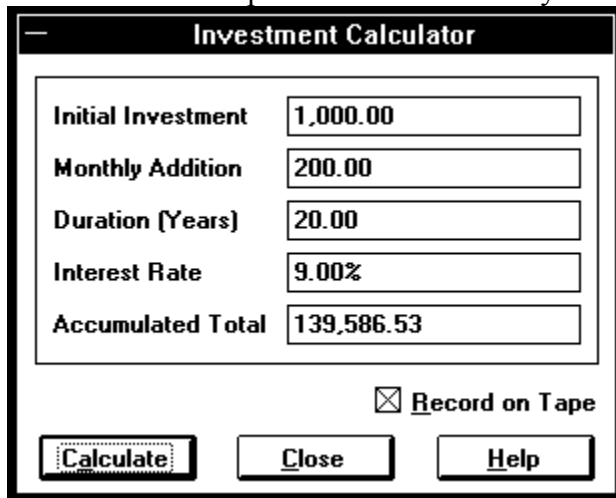
Some calculations result in lengthy numbers which Judy's TenKey rounds and displays according to your decimals setting.

If you calculate a loan, then change the target field, your results may change slightly due to this rounding. For example, if you have calculated the monthly payment for a given loan, and then decide to calculate the annual interest for the "same" loan, you may sometimes find that the monthly payment changes very slightly (because the interest rate had been rounded for display).

This is normal behavior and should have minimal real world impact.

## Investment Dialog

To calculate the expected future worth of your investment:



The screenshot shows a dialog box titled "Investment Calculator". It contains five input fields with the following values: Initial Investment (1,000.00), Monthly Addition (200.00), Duration (Years) (20.00), Interest Rate (9.00%), and Accumulated Total (139,586.53). Below the fields is a checked checkbox labeled "Record on Tape". At the bottom are three buttons: "Calculate", "Close", and "Help".

Field	Value
Initial Investment	1,000.00
Monthly Addition	200.00
Duration (Years)	20.00
Interest Rate	9.00%
Accumulated Total	139,586.53

Record on Tape

Buttons: Calculate, Close, Help

- 1) Enter the amount of your initial investment (can be 0).
- 2) Enter the amount you plan to add to this investment on a monthly basis (can be 0).
- 3) Enter the number of years you plan to have this investment.
- 4) Enter the annual interest rate you expect to accrue.
- 5) Press the <Calculate> button and read the expected future worth of your investment in the "Accumulated Total" field.

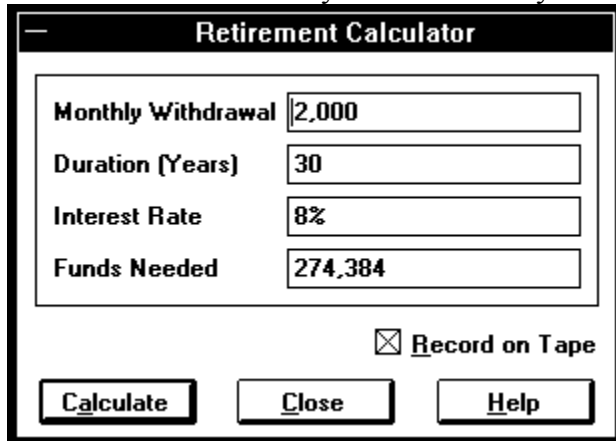
For example, starting with \$1,000 and adding another \$200 per month, earning an average return of 9%, you will have \$139,587 at the end of 20 years.

Note that the "Accumulated Total" does not take into account the effect of inflation.

See also Using Financial Functions.

## Retirement Dialog

To calculate the amount you will need in your retirement fund:



The image shows a dialog box titled "Retirement Calculator". It contains four input fields: "Monthly Withdrawal" with the value 2,000, "Duration (Years)" with the value 30, "Interest Rate" with the value 8%, and "Funds Needed" with the value 274,384. Below the fields is a checked checkbox labeled "Record on Tape". At the bottom are three buttons: "Calculate", "Close", and "Help".

- 1) Enter the monthly withdrawal you would like to make.
- 2) Enter the number of years you would like to continue making withdrawals in the "Duration" field.
- 3) Enter the annual interest rate you expect to accrue on your remaining funds.
- 4) Press the <Calculate> button and read the required retirement fund in the "Funds Needed" field.

For example, if you withdraw \$2,000 a month, earn an average return of 9%, and have a retirement lasting 20 years, you will need \$223,957 at the start of your retirement.

Note that this analysis does not consider the effect of taxes. Also note that inflation will likely reduce the purchasing power of your monthly withdrawals over time (you may want to use the [Inflation Dialog](#) to calculate a more realistic monthly withdrawal).

See also [Using Financial Functions](#).

## Inflation Dialog

The Inflation Dialog Box can calculate either the effective purchasing power of a future, inflated amount (present value), or it can calculate the future, inflated dollars that will be necessary to match the purchasing power of an amount today (future value).

**To calculate a future, inflated amount:**

The screenshot shows the 'Inflation Calculator' dialog box. It features a 'Calculate' section with two radio buttons: 'Initial Amount' (unselected) and 'Final Amount' (selected). Below the radio buttons are four input fields: 'Initial Amount' (10,000), 'Final Amount' (21,911), 'Duration (Years)' (20), and 'Inflation Rate' (4%). A checkbox labeled 'Record on Tape' is checked. At the bottom are three buttons: 'Calculate', 'Close', and 'Help'. A line labeled 'Target' points to the 'Final Amount' radio button.

- 1) Make sure that the "Final Amount" target radio button is selected.
- 2) Enter the current amount in the "Initial Amount" field.
- 3) Enter the number of years into the future you wish to consider, placing this number in the "Duration" field.
- 4) Enter the expected annual inflation rate.
- 5) Press the <Calculate> button and in the "Final Amount" field you will find the future, inflated amount that will be necessary to match the purchasing power of the initial amount.

For example, assuming a 4% inflation rate, 20 years from now the current purchasing power of \$10,000 will be expressed as \$21,911.

**To calculate effective purchasing power of a future, inflated amount (in other words, to deflate it):**

- 1) Make sure that the "Initial Amount" target radio button is selected.
- 2) Enter the future, inflated amount in the "Final Amount" field.
- 3) Enter the number of years into the future you wish to consider, placing this number in the "Duration" field.

- 4) Enter the expected annual inflation rate.
- 5) Press the <Calculate> button and in the "Initial Amount" field you will find the effective purchasing power of the future amount.

For example, assuming a 4% inflation rate, 20 years from now the effective purchasing power of \$10,000 will be \$4,564.

See also [Using Financial Functions](#).

## Number Pad

Provides the basic means of entering and manipulating numbers. See also [Display Components](#) and [Keyboard Configuration](#).

Button	Key	Function
C	Esc	<u>Clear</u> . Stops any calculation in progress, displays 0 on the entry line, and appends a <u>break</u> line to the tape.
CE	Shift+Back	<u>Clear Entry</u> . Erases any number currently displayed in the active entry, but does not interrupt any calculation in progress. For example, if you are adding a long series of numbers and mistype one, using the <CE> button will allow you to retype that number without losing your place.
<-	Back	<u>Backspace</u> . Erases the last digit of the number currently displayed on the entry line.
%	p,%	<u>Percent</u> . Converts a number to a percentage. Mathematicians know that a number expressed as a percentage is equivalent to that number divided by 100, and Judy's TenKey expresses the results accordingly. Example: "50%" => 0.50 (50/100=0.50). <i>Tenkey Syntax</i> : Pressing the '+' or '-' key after the '%' yields special results ('+%','-%').
+/-	~	<u>Sign</u> . Changes the sign of the number currently displayed on the entry line, changing a positive number to a negative and vice versa. Example: "34s" => -34 "-34s" => 34
+	+	<u>Add</u> . <i>Calculator Syntax</i> : Adds the next number to the current subtotal. Example: "5+2=" => 7. <i>Tenkey Syntax</i> : Enters the current number as a positive number in the running subtotal. Example: "5+2+" => 7. <i>RPN Syntax</i> : Adds the current entry to the previous subtotal. Example: "5=2+" => 7.
-	-	<u>Subtract</u> . <i>Calculator Syntax</i> : Subtracts the next number from the current subtotal. Example: "5-2=" => 3. <i>Tenkey Syntax</i> : Enters the current number as a negative number in the running subtotal. Example: "5-2+" => -3.

RPN Syntax: Subtracts the current entry from the previous subtotal. Example: "5=2-" => 3.

\* \* Multiply.

Calculator & Tenkey Syntax: Multiplies the current number by the next entry. Example: "5\*2=" => 10.

RPN Syntax: Multiplies the current entry by the previous subtotal. Example: "6=2\*" => 12.

/ / Divide.

Calculator & Tenkey Syntax: Divides the current subtotal by the next entry. Example: "6/2=" => 3.

RPN Syntax: Divides the previous subtotal by the current entry. Example: "6=2/" => 3.

0-9 0-9 Digit. Causes the digit to appear in the entry line. If currently editing a number, appends the digit to the end; otherwise, it starts a new number from scratch.

. . Decimal. Causes a decimal point to appear in the entry line. If currently editing a number, appends the decimal point to the end; otherwise, it starts a new number from scratch ("0."). Note that this may appear as a comma (",") if you make use of Windows international settings.

e e Exponent. Causes an 'e' to appear in the entry line, allowing you to enter a number in scientific notation (for example, 1.23e+55). Next you should enter an optional exponent sign, and then the exponent itself.

= Enter Total. Calculates and records the current result in the tape.  
Calculator Syntax: Indicates the end of the calculation. Displays and records final result. Example: "5-2+3=" => 6.

Tenkey Syntax: Indicates the end of the calculation. Displays final result and clears cache. Example: "5-2+3=" => -6. When used in a subexpression, does not clear cache (e.g., 2\*3=6).

RPN Syntax: Pushes the current entry onto the stack.

S Ctrl+Enter Subtotal. Appends the current subtotal to the bottom of the history tape.

## **Judy's Conversions**

Judy's Conversions is another product by Judy's Applications that lets you easily convert a number from one unit to another (for example, feet to meters, or teaspoons to gallons).

Judy's Conversions comes with the same money-back guarantee as Judy's TenKey, and when you order both together, you can get Judy's Conversions for 50% off! Plus, you don't have to pay any extra shipping and handling, so you really save even more. Considering the low original price of US\$9.95, it's almost free.

Bottom line: You can get a copy of Judy's Conversions for only an extra US\$4.95!

See also [Registration Procedure](#).



