



TI-SmartView™
Emulator Software for the
TI-73 Explorer™ Guidebook
for Windows® and Macintosh®

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Getting Started

Features

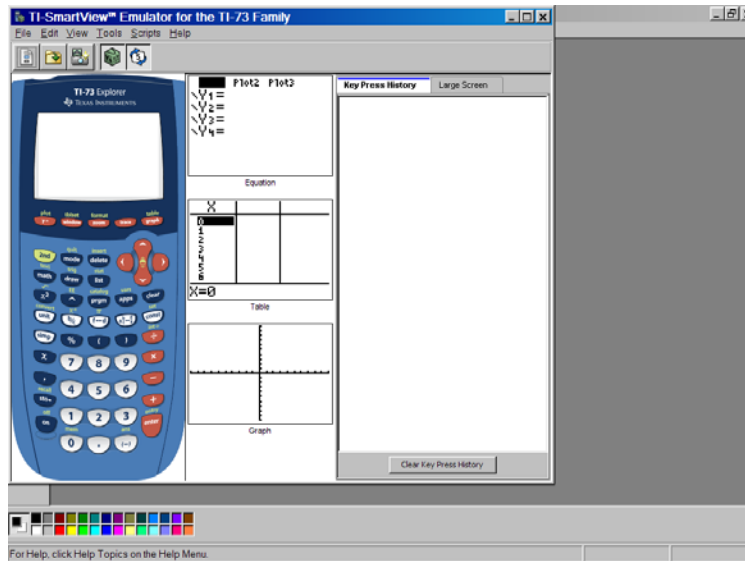
- **Key Press History** — Review recently pressed keys from the key press history pane or on the large screen pane.
- **Adjustable Screen Size** — Use the small, medium, and large screen sizes or customize the screen size.

Overview of TI-SmartView™ Emulator for the TI-73 Explorer™ graphing calculator

The TI-SmartView™ Emulator for the TI-73 Explorer™ software gives you a TI-73 Explorer™ calculator on your computer. The functionality of the TI-73 Explorer™ calculator is at your disposal, including the ability to load and use calculator files such as applications (Apps), lists, programs, and so on.

TI-SmartView™ lets you show the TI-73 Explorer™ calculator to an audience without using calculator-specific projection equipment and gives you additional functionality that aids in presentations and demonstrations.

- Supplement the current TI-73 Explorer™ screen by using the View³™ pane to show three extra screens simultaneously. You can select any three of the following calculator screens: Y= editor, table, graph, stat plot, list, and window.
- Repeat demonstrations quickly and easily by using scripts to play back a series of keystrokes.
- View the history of your calculator entries as well as a large version of the current calculator screen, and open scripts by displaying the key press history window.
- Capture screen images that you can save and use in other documents.



System requirements

The computer that you use to run the TI-SmartView™ Emulator for the TI-73 Explorer™ software must meet the following hardware and software requirements.

Windows®:

- Windows Vista® (Home Premium/Ultimate/Business), Windows® XP (Home or Professional edition) with Service Pack 2; or Windows® 2000 Professional edition with Service Pack 4.
- 900 MHz Pentium-compatible CPU
- 512 MB RAM
- 125 MB of available hard-disk space
- CD-ROM drive or active Internet connection for installation
- Internet Explorer 6.0 or later;
Netscape® 5.0 or later;
Opera 7.0 or later;
or Mozilla™ Firefox 1.0

Macintosh®:

- Mac® OS X 10.4 or 10.5

- G3 CPU or later (900 MHz)
- 512 MB RAM
- 40 MB of available hard-disk space
- CD-ROM drive or internet connection for installation
- Supported Internet browser:
 - Safari™ 2.0 or later;
 - Mozilla™ Firefox 1.0 or later;
 - AOL® Browser 1.0;
 - Microsoft Internet Explorer 6.0 or later;
 - or Netscape® 5.0 or later

Installing TI-SmartView™ Emulator for the TI-73 Explorer™ graphing calculator

If you are installing a full version of the TI-SmartView™ software (as opposed to a trial version), find the CD key located on the CD case or CD. You need to enter the CD key during a full-version installation.

Before you begin

To install the software on your computer, you must have the appropriate privileges. You will need Administrator privileges on Windows. During installation, you may need to specify your Macintosh password.

If you do not have the necessary privileges, contact your network administrator.

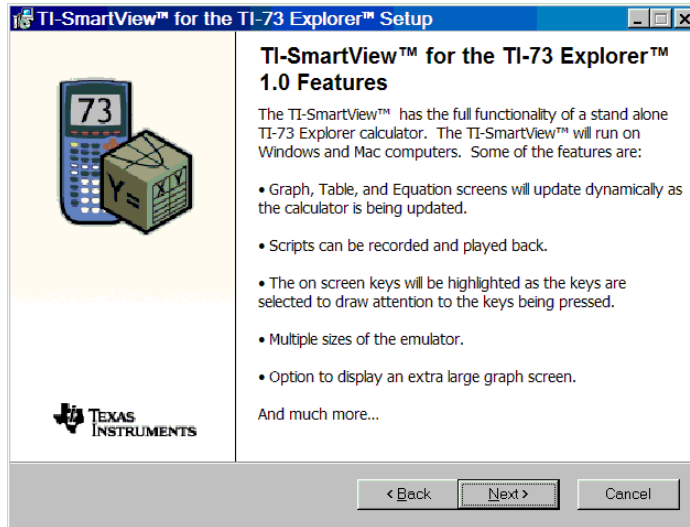
Installing the software

1. Close any applications that are open.
2. Insert the TI-SmartView™ CD into the CD-ROM drive.

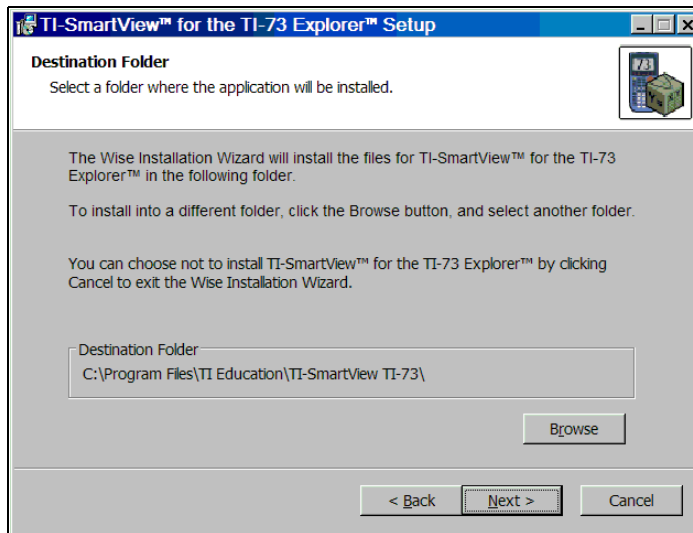
The CD should launch automatically. If the CD does not launch, double-click the appropriate launch file on the CD.

Macintosh®: A message informs you that the installation package will determine whether the software can be installed on the computer. Click **Continue** to go to the next screen.

3. Click **Next** at the bottom of the Welcome screen, and click **Next** again on the Features screen.



The Destination screen displays.



4. Click **Next** on the Destination screen to accept the default installation location, or click **Browse** to navigate to a different folder for application installation. Click **Next** to start the installation.

Macintosh®: If prompted, enter your password on the Authentication screen. A progress bar displays during installation. A message informs you that a restart is required after installation; press **Continue** to complete installation.

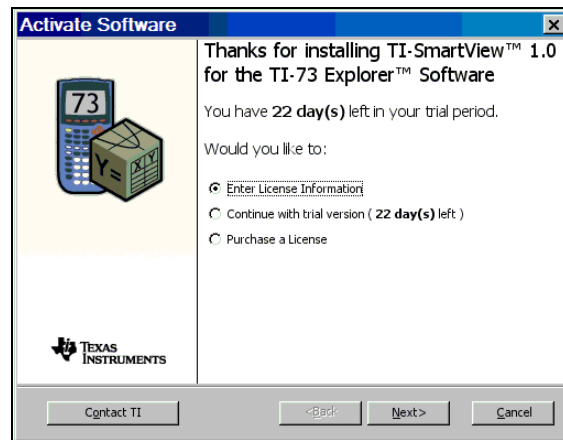
5. Windows®: Click **Finish** on the screen that confirms successful installation. Double-click the TI-SmartView™ icon to start the application and activate the software.

Macintosh®: Click **Restart** and then start the TI-SmartView™ software to activate it.

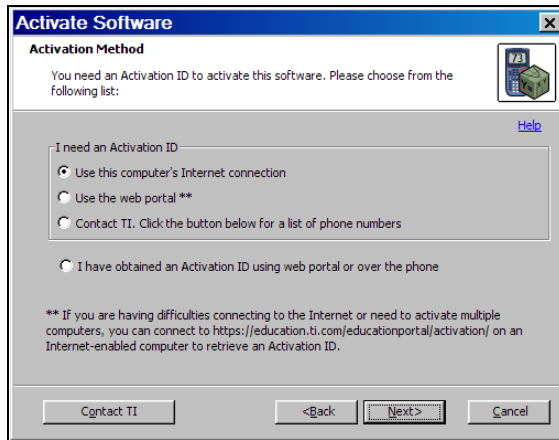
If you have already purchased the software, you should activate it. Activating the software allows you to continue using it past the 30-day evaluation period. It prevents unauthorized copying of the product onto more computers than the license agreement allows.

Activating the software

1. To begin the activation process, start TI-SmartView™ software by double-clicking the icon. On the Activate Software screen, click **Activate this software**, and then click **Next**.



2. Review the options displayed to determine which activation method you should use. Regardless of which activation method you prefer, you will need to supply the Serial Number and License Number included with the installation CD.

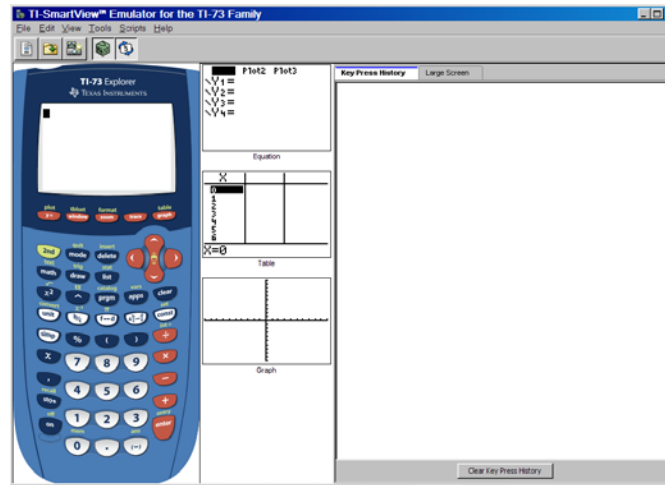


- **Internet**— This method uses your Internet connection to activate your software. You provide the Serial Number and License Number.
 - **Web Portal**— This alternative method takes you to a Web page where you can retrieve an Activation ID. The ID is displayed on the Web page. If you provide your e-mail address, the ID is also sent to you by e-mail.
 - **Phone**— You provide a TI representative with the Serial Number and License Number as well as an Installation ID displayed on your screen. The representative then provides an Activation ID.
 - **I already have an Activation ID** — After accepting a license agreement, you fill out a screen with the Serial Number, License Number, and the Activation ID.
3. Click an activation method, then click **Next** and follow the instructions to type the Serial Number, License Number, and Activation ID.

Note: When entering the License Number, be careful to not enter a zero for the letter O or a letter O for a zero. Similarly, do not confuse the number one with a lowercase letter L.
 4. Type contact information and click **Next**.
 5. Provide information to create a user profile (optional), and then click **Next** to complete software activation.

Opening the software on your computer

- ▶ Double-click the TI-SmartView™ icon. The application starts.



Things you need to know

The mouse pointer takes the place of your finger pressing keys on the calculator.

When you use the mouse, remember that the pointer takes the place of your finger. You must click the keys on the on-screen calculator like you would press the keys on the TI-73 Explorer™ calculator. The TI-SmartView™ Emulator calculator screen is *not* interactive. For example, when you change mode settings, you might be tempted to click the mode setting on the calculator screen to select it. However, clicking on the screen does nothing. You must click the arrow keys to move the cursor to the desired setting and then click **ENTER** to select it.

Hold down an arrow key to scroll the cursor continuously.

When you use an arrow key to move the cursor, you can hold down the key to scroll the cursor continuously, instead of having to press the key repeatedly. In the key press history and in a script, the icon for a repeating arrow key has a clock symbol attached to it. For example:

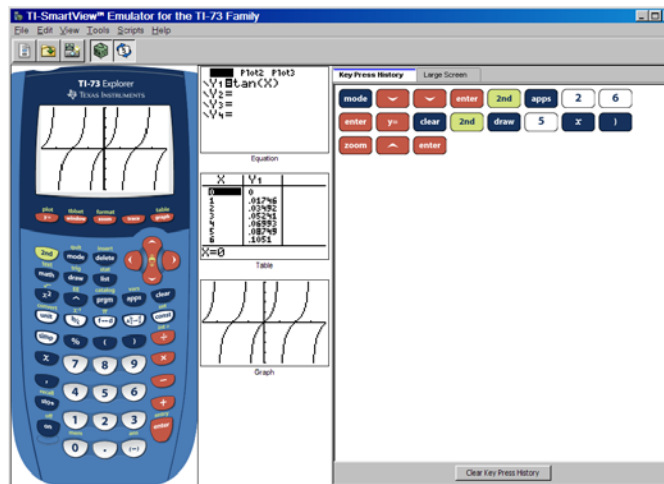


When you record a script, you record only calculator key presses. These key presses can be difficult to interpret, viewed by themselves.

Because you record key presses, editing a script can be a little tricky. For example, if you change the mode to radian, the script records `MODE` `↓` `↓` `▶` `ENTER`. The script doesn't overtly tell you that you changed the mode to radian. For this reason, it can be quite helpful to step through a script one key press at a time, or to play the script back at a slower speed so that you can see exactly where an edit needs to be made.






Choosing a display option

By default, the TI-SmartView™ Emulator software displays the calculator and two optional panes of additional information. You can show or hide these optional panes, or change the type of information displayed in each one.



The View³™ pane initially shows the Y= editor, table, and graph screens. However, you can select which calculator screen you want to show for each of the three displays. (The stat plot, list, and window screens are also available.) The screens are updated each time you press one of the graphing keys (`WINDOW`, `ZOOM`, `TRACE`, `GRAPH`), change the Window or Zoom settings, or press `ENTER`.

The third pane includes tabs that you can click to see either the key press history, a large screen display of what the device image is displaying, or any open scripts. When you display the large screen in the third pane, you can hide or show the key press history information at the bottom of the pane.

Display Option	Click:
View ³ ™ pane	<p>View > Show/Hide View³ or  to show or hide the pane.</p> <p>View > View³ Options to select a calculator screen for each display.</p>
Key press history, large screen, and script pane	<p>View > Show/Hide Key Press History or  to show or hide the pane.</p>
Scripts	<p>File > Open or  to open an existing script.</p> <p>File > New Script or  to open a new, blank script.</p> <p>The close button on the script's tab  to close a script.</p>

Notes:

- Hiding the key press history does not clear it.
- Hiding the key press history does not delete or close open scripts.
- You can record a script without displaying the key press history.

Changing the size of the TI-SmartView™ emulator

When you first use the TI-SmartView™ Emulator software, a full-screen image for 1024 x 768 screen resolution is displayed. You can use whichever size you want, but the small, medium, and large versions are optimized for the following screen resolutions.

If your screen resolution is:	Click:
800 x 600	View > Size > Small Emulator
1024 x 768	View > Size > Medium Emulator
1280 x 1024	View > Size > Large Emulator

Changing the face plate

You can change the face plate on the TI-SmartView™ emulator.

- ▶ Click **View > Color** and then click an option.

Saving and loading an emulator state

When you save the emulator state, a file is created that stores the calculator with all of the changes that you have made to its setup. Think of the emulator state file as representing a single TI-73 Explorer™ calculator that you have used and then set aside. When you load an emulator state, you pick up that same TI-73 Explorer™ calculator to use again. All of the changes that you made to the calculator are intact.

For example, you might want to set up a class demonstration by entering functions in the Y= editor and changing Window and Zoom settings. When you save your changes in an emulator state file, you simply load the file to show your demonstration. If you want to create different demonstrations for different classes, you can create multiple emulator state files. There is no limit on the number of emulator states that you can save.

Note: The key press history, screen capture images, open scripts, and the face plate color are *not* saved in the emulator state file.

Saving the emulator state

1. Click **File > Save Emulator State**.
2. In the dialog box:
 - a) Navigate to the folder in which you want to store the emulator state file.
 - b) Type a file name. Use a name that describes the emulator state.
 - c) Click **Save**.

Loading an emulator state

1. Click **File > Load File**.
2. In the dialog box:
 - a) Navigate to the folder that contains the emulator state file.
 - b) Click the emulator state name to highlight it.
 - c) Click **Open**.


Resetting the emulator state

Resetting the emulator state returns the TI-SmartView™ Emulator software to the TI-73 Explorer™ factory-default settings. The optional View³™ pane (center) and the right pane are shown. The key press history is cleared. Any open scripts are stopped, but remain open.

1. Click **Tools > Restore Default State**.
2. In the dialog box, click **Yes** to confirm that you want to reset the emulator state.

Saving calculator data to the computer

By saving data (lists, programs, and so forth) from the TI-SmartView™ calculator to files on the computer, you can make backup copies of that data. If you delete the data from the TI-SmartView™ Emulator, you can load the calculator files from the computer at any time.

1. Click **File > Save Calculator File**.
The Device Contents dialog box lists the data items on the TI-SmartView™ calculator, which may take several seconds.
2. Click an item to highlight it.
 - To select multiple items, click an item and then press and hold **Ctrl** on a PC keyboard or **Cmd** on a Macintosh keyboard as you click each additional item.
 - To select a range of items, click the first item in the range. Then hold down **Shift** and click the last item in the range.
3. Click **Save Selected Item(s)**.
4. In the dialog box, navigate to the folder in which you want to store the files.
 - Be sure to either open the folder or click the folder to highlight it. The folder name must be shown in the **File name** box at the bottom of the dialog box.
 - If necessary, click  **New Folder** to create a new folder.
5. Click **Save**.

Each selected item is saved as a separate file on the computer. File names are assigned automatically. The file name's extension identifies the data type.

If the folder already contains a file with the assigned name, you are prompted whether to overwrite the existing file.

The Device Contents dialog box stays open so you can select and save additional data items.

6. When you're finished, click **Close**.

Note: In the Device Contents dialog box, you can sort the list by clicking a heading. For example, click **Name** to sort by name and switch between ascending (a-z) and descending (z-a) order.

Name	Type	Size	Ram/Archive
Y_2_	Equation	6	RAM
Y_1_	Equation	4	RAM
Y	Real	9	RAM
X	Real	9	RAM

Loading a calculator file from the computer

If you previously stored calculator files containing lists, programs, applications, etc., on your computer, you can load them into the TI-SmartView™ software.

1. Click **File > Load File**.
2. In the dialog box:
 - a) Navigate to the folder that contains the file you want to load.
 - b) Click the file name to highlight it.
 - c) Click **Open**.

If TI-SmartView™ Emulator already contains a data item with that name, you're prompted whether to overwrite the existing item.

Calculator file names on the computer

Calculator file names have the form:

filename.73?

where *filename* is as close as possible to the data item's name on the calculator, 73 indicates the file was created by the TI-SmartView™ Emulator or a TI-73 Explorer™ graphing calculator, and ? is a letter that identifies the type of data. Common data types are:

If ? is:	Type of data
c	constant

If ? is:	Type of data
y	function
i	picture
k	Flash application
l	list (real or categorical)
n	number (real or fraction)
p	program
t	table setup
v	application variable
w	window range

Note: If you load a Flash application file, TI-SmartView™ Emulator automatically installs the application.

Updating the software from the Internet

Visit education.ti.com for free software updates that are periodically available for downloading.

Working with images

Capturing calculator screens

You can capture the current calculator screen image using the TI-SmartView™ Emulator screen capture tool. When you capture a screen, the Screen Capture window is displayed. In this window, you can view, manipulate, and save screen images.



- ▶ Click **Tools > Take Screenshot** or click .

With a border, the image size is 100 pixels wide by 68 pixels high. Without a border, the image size is 96 pixels wide by 64 pixels high. A border is automatically added to each image when you capture it, but you can remove it.


The number of screen images you can capture is limited only by the available memory on your computer. Each unsaved screen image is stored in memory until you close the main TI-SmartView™ window. Closing the Screen Capture window does not discard unsaved screen images.


Adding or removing a border

The toolbar button for adding or removing a border toggles between

add  and remove  depending on whether or not the selected image contains a border.

Adding or removing a border on a single screen image


1. Click the screen capture image to select it.
2. Click **Edit > Remove Border** or click  to remove the border.
—or—

Click **Edit > Add Border** or click  to add a border.

Adding or removing a border from a group of screen images

1. Switch to thumbnail view.
2. Select the group of images. You can either:


- Click the first image you want to select, and then as you click each additional image, hold down **Ctrl** on a Windows® keyboard or **Cmd** on a Macintosh® keyboard .
 - Select a range of images by clicking the first image in the range, holding down **Shift**, and clicking the last image in the range.
3. Click **Edit > Remove Border** or click  to remove the border
—or—

Click **Edit > Add Border** or click  to add a border.


Note: To select all of the images, click **Edit > Select All**.

Saving a screen image

You can save screen images in TIF, GIF, or JPEG formats. The images are saved in your My Documents folder unless you specify a different location to save them. All images are saved at the size they are currently displayed.

1. Click the screen image you want to save.
2. Click **File > Save Screen** or click .
3. In the dialog box:
 - a) Navigate to the folder in which you want to store the screen image file.
 - b) Select the file type for the appropriate image format.
 - c) Type a file name. Use a name that describes the screen image.
 - d) Click **Save**.

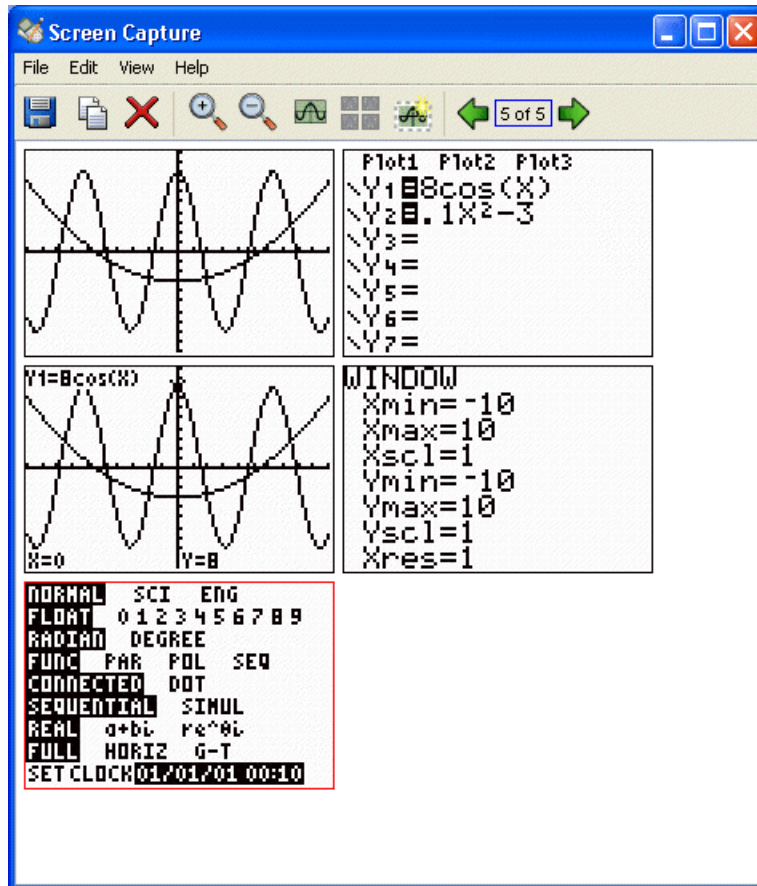
Note:



- If you have previously saved the selected screen image, clicking **File > Save Screen** or  overwrites the previous file. To save the file in a different location, with a different name, or as a different file format, you must click **File > Save Screen As**.

- To save all the images at once, click **File > Save All Screens**. When you do this, you select the location to save the files in the Save All window, but do not specify file names. Each screen image is saved with its default file name. If that name already exists, you're prompted whether to overwrite the existing file.



Viewing screen images

When you capture a screen image, that image opens in the Screen Capture window. You can view the images individually or as a group of images, called thumbnails. A reference name is displayed under each image.



- ▶ To view screen image thumbnails, click **View > Thumbnails** or click .
- ▶ To view individual screen images, click **View > Single Screen** or click .



Navigating among screen images

- ▶ To view the previous screen image, click **View > Previous Screen** or click .
- ▶ To view the next screen image, click **View > Next Screen** or click .

Zooming in or zooming out

You can zoom in or out on any single image to view a larger or smaller version of it.

You can save a larger or smaller version of a screen image by zooming in or out before you save it. For example, to save an image that is larger than the standard 96 x 64 size, zoom in until the image is the size you want and then save it.

- ▶ To display a larger screen image, click **View > Zoom In** or click .
- ▶ To display a smaller screen image, click **View > Zoom Out** or click .

Dragging and dropping an image to another application

You can drag and drop any TI-SmartView™ screen image to paste it into another application. These images include the following:

- Saved or unsaved screen capture images
- View³™ pane screens
- The Large Screen image

Note: In the Screen Capture window, the selected image has a red border. However, the borders on the Large Screen image and the View³™ screens do not change color when you select them.

To drag and drop a screen image into another application:

1. Adjust the sizes of the windows of the two applications so that both of them fit on the computer screen.
2. To drag-and-drop the image:
 - a) Click the screen image to select it.
 - b) Drag the screen image from the TI-SmartView™ Emulator and then drop it into the other application.

Using the key press history



What is the key press history?

Each key you click on the emulator is recorded automatically in the key press history. You can see the key press history from the key press history pane and the large screen pane. Using the key press history to see a listing of all the keys you've used has several benefits, including:




- If a calculation gives unexpected results, you can view the key press history to see if you entered the correct data.
- If you perform a calculation and then find you need to perform it repeatedly, you can copy those keys from the key press history and paste them into a script. When you need to repeat the calculation, you can play the script instead of re-entering all the key presses.

The key press history shows some key sequences in a different form than they're shown in the user guide for the TI-73 Explorer™ calculator. For example, suppose you display the calculator's **MEMORY** menu.

- The user guide shows the key sequence as $\boxed{2\text{nd}}[\text{MEM}]$, where [MEM] is the 2nd function of the $\boxed{0}$ key.

- The key press history shows the key sequence as   because those are the actual keys you click.

Similarly, suppose you select the **round(** function from the **MATH NUM** menu.

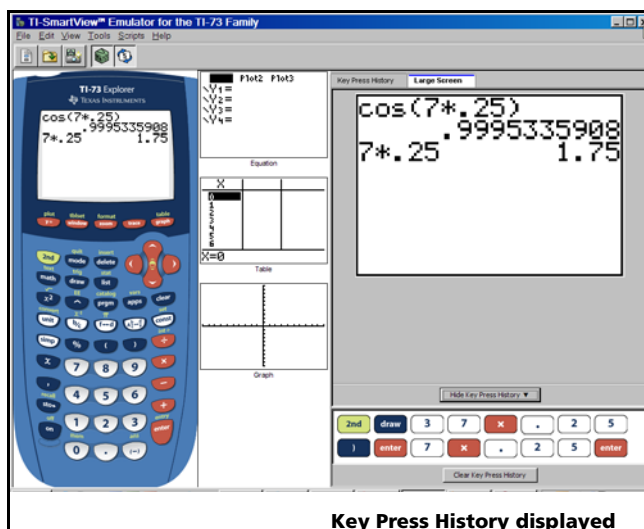
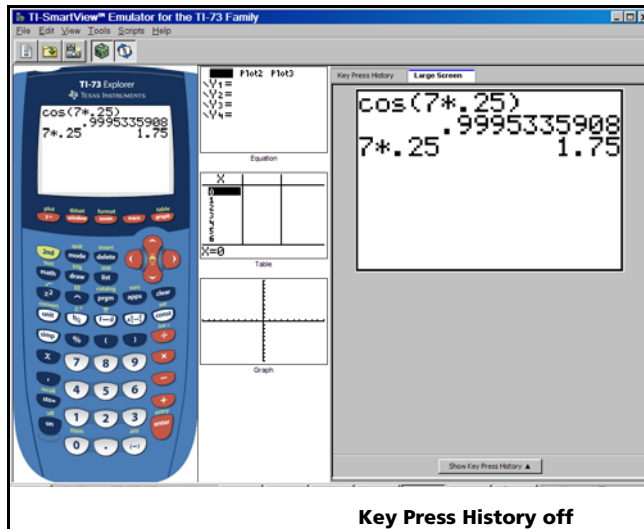
- The user's guide shows the function as **round(**.
- The key press history shows    because those are the keys you click.

Showing or hiding the key press history

- ▶ Click **View > Show/Hide Key Press History** or click .

When the TI-SmartView™ right pane is showing, you may need to click the Key Press History tab to activate it. The right pane also shows tabs for Large Screen and any open scripts. The active tab has a colored line across its top.

You can also view and clear the key press history from the large screen pane. Click **Show Key Press History** or **Hide Key Press History** to show or hide the list of keys pressed.



When the key press history is shown on the large screen pane, you can click **Clear Key Press History** to clear the list of keys pressed. Hiding the right pane does not clear the contents of the key press history or any open scripts.

Clearing the key press history

- ▶ Click **Edit > Clear Key Press History**, or click **Clear Key Press History** on the key press history or large screen pane.

Clearing the key press history does not affect the contents of any open scripts in the TI-SmartView™ right pane.

Copying the key press history to another application

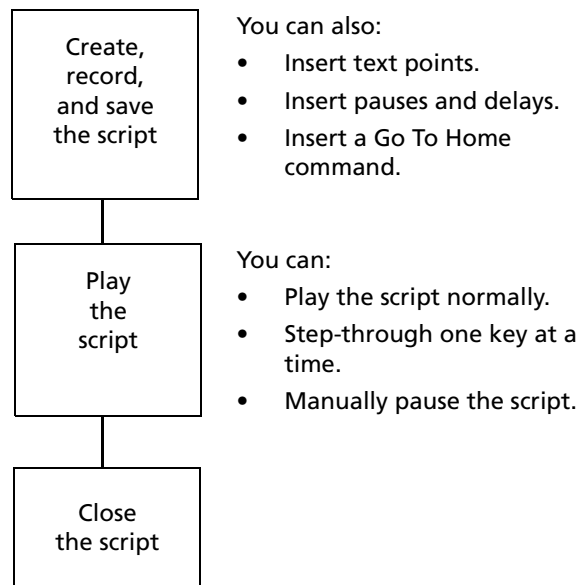
You can copy all or only a selected portion of the key press history to another application such as a word processor. The procedure is the same as used to copy scripts.

Using scripts

What is a script?

A script is a series of calculator key presses that can be stored and played repeatedly. By saving the script, you can open it at a later time and play it again without having to re-enter all the key presses.

Overview of using a script



Suppose, after performing one or more calculations, you decide to create a script that performs those same calculations. Instead of repeating the key presses while recording a new script, you can:

- Copy keys from the key press history and paste them into the script.
- Edit the script as necessary so the keys work properly in the context of that script.

Showing or hiding the script pane

Any open scripts are shown in the TI-SmartView™ Emulator right pane, which is also used to show the key press history. To toggle the right pane on and off:

- Click **View > Show/Hide Key Press History** or click .

The right pane shows tabs for the Key Press History, Large Screen, and any open scripts. The active tab has a colored line across its top. Click the appropriate tab to show its contents.



Hiding the right pane does not clear the contents of any open scripts or the key press history.

Recording a new script

You can begin recording a new script at any time.

1. Click **File > New Script** or click .

The TI-SmartView™ right pane opens automatically if it's not already open, and a new blank script appears in the pane. The new script has a tab at the top of the pane, with a colored line across its top to indicate it's active. The tab shows the script's default name, which is Script 1, Script 2, etc.

2. Click **Scripts > Record** or click  on the script's toolbar.
3. Click the keys on the emulator to record the key presses for your script.
4. When you're finished, click **Scripts > Stop** or click .

Note:

- You can also insert Go To Home commands, text points, delays, and pauses in a script.
- You can help ensure that your script plays properly under various conditions by following a few simple guidelines. (See "Tips for recording a script" on page 27.)
- You can reuse key sequences that you previously entered. Copy the keys from the key press history and paste them into the script. The procedure is the same as used to copy scripts. (See "Copying a script to another application" on page 37.)

Tips for recording a script

If you record a script assuming that the emulator will always have the current settings, you may have problems later if you play the script with different calculator settings. Therefore, it's a good practice to add the necessary settings directly into the script. The following tips can help you create scripts that play correctly in a variety of situations.

At the beginning of a script:

- Insert a Go To Home command to ensure the script starts on the home screen. This lets your script begin at a known starting point, regardless of the screen shown when you play the script.
- Press $\boxed{2\text{nd}} \boxed{[\text{MEM}]} \mathbf{7} \mathbf{2} \mathbf{2}$ to reset the memory to its defaults.

When graphing:

- Press $\boxed{[\text{CLEAR}]}$ before entering an equation into the Y= editor.
- Insert a Pause command after graphing a function.

When using variables, lists, and statistical data:

- Clear a variable before storing to it.
- Press $\boxed{2\text{nd}} \boxed{[\text{MEM}]} \mathbf{6} \boxed{[\text{ENTER}]}$ to clear all lists before storing to them.

When selecting an item from a menu:

- Press the number or letter for that item. Suppose you need **Solver...** from the MATH menu. The script runs faster if you use $\boxed{[\text{MATH}]} \mathbf{6}$ (two key presses) instead of $\boxed{[\text{MATH}]} \boxed{\downarrow} \boxed{\downarrow} \boxed{\downarrow} \boxed{\downarrow} \boxed{\downarrow} \boxed{[\text{ENTER}]}$ (seven key presses).

When starting an application from within a script:

- If you share the script with other people using TI-SmartView™ software on different computers, remember that their APPLICATIONS menus may not list the same applications in the same order. Pressing $\boxed{[\text{APPS}]} \mathbf{4}$ to start an application on your TI-SmartView™ Emulator screen may not start the same application on theirs.
- Instead, have your script press $\boxed{[\text{APPS}]}$ to display the APPLICATIONS menu and then use a text point telling the user to select the appropriate application from the list.

At the end of a script:


- Insert a Pause command. This is particularly useful if a script displays text points that you want the user to see after the script finishes. Otherwise, text points are closed automatically at the end of a script.

Note: When resetting the memory, clear only the applicable portion of the memory. Using **[2nd] [MEM] 7 1 2** to reset all RAM is not required in most situations.

Playing a script

After recording a new script or opening an existing one, you can play it. You cannot play a script while you're recording it.

1. Select the tab for the appropriate script. The active tab has a colored line across its top.

2. Click **Scripts > Play** or click  .

Adjusting the script speed

You can vary the speed at which each key press in a script is executed, from Slow (approximately one key press every 5 seconds) to Fast (approximately one every 1/2 second).

1. Click **Scripts > Adjust Script Speed**.
2. In the submenu, click a speed in the displayed range.

Note:

- You can also use the slider in the script's toolbar. Drag the slider to the appropriate position.



- The speed setting affects every key press in the script, which may not be what you want. Suppose the script enters numbers such as 425,237,234. Setting the speed to one key press every 2 seconds takes 18 seconds to enter the number. Instead, you may want to use a faster speed and insert pauses or delays at certain points in the script.

Saving a script

After recording a new script or editing an existing one, save the script so you can use it again later.

1. Select the tab for the appropriate script. The active tab has a colored line across its top.

2. Click **File > Save Script** or click  .

For an existing script that was saved previously, the new version automatically overwrites the existing one. For a new script, the Save As dialog box opens.


3. If you see the dialog box:
 - a) Navigate to the folder in which you want to store the script file.
 - b) Type a file name. Use a name that indicates the purpose of the script.
 - c) Click **Save**.

Note: If you do not want to save the changes you made to an existing script, close the script instead of saving it. Click the **X** in the script tab to close the script. When prompted whether to save the changes, click **No**.


Saving a copy of a script

Sometimes you may need a script that is similar to an existing one but with some changes. Instead of recording a new script, it may be easier to copy the existing script and edit it.

1. Open the script you want to copy, and select its tab. The active tab has a colored line across its top.
2. Click **File > Save Script As**.


Note: Do not click .

3. In the dialog box:
 - a) Navigate to the folder in which you want to store the copy.
 - b) Type a file name. Use a name that indicates the purpose of the script.
 - c) Click **Save**.

Note: If you change a script and want to keep those changes in the existing script, click **File > Save Script** or  before selecting **Save Script As**. Otherwise, the changes are saved in the copy but not in the original script.

Opening an existing script

After a script is recorded and saved, you can open it later and play the script again, edit it, or save a copy of it.

1. Click **File > Open Script** or click .
2. In the dialog box:
 - a) Navigate to the folder that contains the script file.
 - b) Click the script name to highlight it.
 - c) Click **Open**.

The script opens in the TI-SmartView™ right pane. A tab with that script name appears at the top of the pane along with tabs for Key Press History, Large Screen, and any other open scripts. You can click any of those tabs to jump from one to the other. The active tab has a colored line across its top.

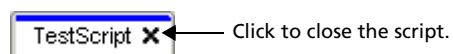
Note:

- The most recently used scripts are listed at the bottom of the **File** menu. Click a script name to open it.
- When several scripts are open at the same time, there may be too many tabs to fit across the right pane. If so, left and right arrows appear on the right of the tab area. Click these arrows to scroll left and right along the available tabs. You may also want to close scripts when you're not using them.

Closing a script

When you're finished using a script, you may want to close it. This removes the script tab from the right pane. If the script is not saved, you are prompted whether to save it.

- ▶ Click **File > Close Script** or click the **X** on the script tab.



Stepping through a script

You can step through a script one key press at a time. This is the same effect as if you had used pause commands to halt the script between every key press. Depending on the length of the script, you may want to step through all or only parts of it.



Stepping through a script from the beginning

In the script pane, instead of playing the script:

1. Click **Scripts > Step Through** or click  to start the script.





Note: Do not click **Scripts > Play** or .

The script pauses automatically after every key press.

2. Click  repeatedly to step through each key press.
3. After stepping through a series of key presses, you can click  to play the remaining key presses continuously.


Stepping through part of a script

In the script pane:

1. Click **Scripts > Play** or click .
2. Click **Scripts > Pause** or click  to pause at a location before you want to start stepping through.
3. Click **Scripts > Step Through** or click  repeatedly to step through each key press.
4. After stepping through a series of key presses, you can click  to play the remaining key presses continuously.

You can repeat steps 2 - 4 as often as necessary to step through different parts of the script.


Stopping a script while stepping through it

While you are stepping through a script, **Scripts > Stop** or  may not be available. If not, you can:

1. Click  to play the script.
2. Then click .

Stopping a script

When you finish recording a script, you need to stop recording. When you play a script, you may want to stop the script manually at some time before it would normally end.

- ▶ Click **Scripts > Stop** or click .


Unlike when you pause a script, you cannot continue playing the script from the location where it stopped. You can only replay the script from the beginning.



Pausing a script

At various times while a script is running, you may want to halt it temporarily. For example, you may want to view an intermediate result or graph before continuing with another operation that changes the calculator screen or graph. You can either pause the script manually or insert a pause command directly into the script.

Pausing the script manually


In the script pane, while the script is playing:


- ▶ Click **Scripts > Pause** or click .

The **Play**  button changes to **Pause**  when you play the script. After you pause the script, the button changes back to **Play**. Click **Play** again when you're ready to continue the script.

Inserting a pause command in the script


In the script pane:

1. Click the location where you want to insert the pause.
The cursor appears at that position.
2. Click **Scripts > Insert Pause** or click  at the bottom of the script pane.

 appears in the script to mark the location of the pause. When you play the script, it always halts at this pause command.

To continue, click **Scripts > Play** or click .

Deleting an existing pause command


Delete the  icon the same way you would delete any other key press in the script.

Inserting a delay into a script


In some cases, you may want to delay the script a specified period of time before it continues to the next key press. For example, you may want to display a result or graph for a few extra seconds before the script executes the next key press.

Inserting a delay

In the script pane:

1. Click the location where you want to insert the delay.
The cursor appears at that position.
2. Click **Scripts > Insert Delay** or click  at the bottom of the script pane.




 appears in the script to mark the delay.


A delay has the same effect as a blank key press. It lasts as long as a single key press (as determined by the script's speed setting) and has no other effect on the script.

For a longer delay, insert more than one. For example, suppose the script speed is set for one key press every second. To delay five seconds, insert five delays.

Note: If you don't know how long to delay the script, consider inserting a pause instead. After the script pauses, it does not start again until you

click **Scripts > Play** or click  to continue.

Deleting an existing delay


Delete the  icon the same way you would delete any other key press in the script.


Inserting a text point into a script

If you use a script to show a presentation, you may want to display a text screen at certain locations to explain a result or describe what the script will be doing next.

Inserting a new text point

In the script pane:

1. Click the location where you want to insert the text point.
The cursor appears at that position.
2. Click **Scripts > Insert Text** or click  at the bottom of the script pane.
3. In the dialog box:
 - a) Type the text using on the computer keyboard.
 - b) Click **Enter**.


 appears in the script to mark the text point.

Note:

- When you run the script, the text is displayed in a separate text pane that opens below the script. That text pane closes automatically when the script stops. To leave the text pane open for a longer time, insert a pause or delay immediately after the text point or at an appropriate location before the end of the script.
- The text from all text points in the script is placed one after another in the text pane. As necessary, you may need to scroll to see all the text.
- You can change the size of the displayed text by dragging the slider located in the area between the script pane and the text pane.

Editing an existing text point

In the script pane:

1. Double-click the  marker.
The Text Point Dialog box opens.
2. Edit the text as necessary.
3. Click **Enter**.

Deleting an existing text point


Delete the **T** marker the same way you would delete any other key press in the script.

Inserting a Go to Home command

A script executes each key press in sequence. However, these key presses may have different effects depending on the screen (Home, Graph, Table, etc.) shown when you play the script. By using a Go To Home command at the beginning of a script, you can ensure that it begins on the Home screen.

Inserting a new Go To Home

In the script pane:


1. Place the cursor at the beginning of the script.
2. Click **Scripts > Insert Go To Home Screen** or click  at the bottom of the script pane.



appears in the script to mark the location of the command.

Note: You can insert a Go To Home command at any location in your script. While you're recording key presses inside a script, however, it's usually better to record the actual key presses used to display the Home screen.

Deleting an existing Go To Home command

Delete the  icon the same way you would delete any other key press in the script.

Editing a script

Editing a script is similar to editing a text document. For example, you can drag the mouse to highlight a series of keys the same as you would drag to highlight text in a word processor. (You can also hold down **Shift** and use the arrow keys on your computer keyboard.)


Inserting key presses or script elements (pauses, delays, etc.)

With the script shown in the right pane:

1. Click **Scripts > Record** or click .
2. Click the location where you want to insert the keys or script elements.
Note: Be sure to position the cursor after you start recording. If you position the cursor first, it automatically jumps to the beginning of the script when you start recording.
3. You can:
 - Click the keys you want to insert.
 - or –
 - Use the buttons at the bottom of the script pane to insert a text point, delay, pause, or Go To Home command.
4. When you're finished, click **Scripts > Stop** or click .



Deleting key presses or script elements

With the script shown in the right pane, either:

- Place the cursor immediately to the left of the items you want to delete. Then press **Delete** on your computer keyboard.
- or –
- Place the cursor immediately to the right of the items you want to delete. Then press **Backspace** on your computer keyboard.
- or –
- To delete multiple items at one time, highlight the items. Then click **Edit > Cut** or click  on the script's toolbar.

Moving items to a different location

With the script shown in the right pane:

1. Highlight the items you want to move.
2. Click **Edit > Cut** or click .
3. Click the location where you want to insert the items.
4. Click **Edit > Paste** or click .

Note: You can also use the mouse to drag the highlighted items to the new location.

Copying items to a different location

With the script shown in the right pane:

1. Highlight the items you want to copy.

2. Click **Edit > Copy** or click .

3. Click the location where you want to insert the copy.

4. Click **Edit > Paste** or click .

Note: You can also hold down **Ctrl** on your computer keyboard and use the mouse to drag a copy of the highlighted items to the new location.

Copying a script to another application

You can copy all or only a selected portion of a script to another application such as a word processor. You can copy the key graphics as they are shown in the script pane, or you can copy the key presses as font text characters.

Note: When you copy as font text characters, those characters use the TI73EmuKeys font. This font is installed on your computer automatically when you install the TI-SmartView™ software.

Copying keys as graphics

1. Open the appropriate script.

2. Select the keys you want to copy. To select all the keys, click **Edit > Select All**.

3. Click **Edit > Copy**, switch to the other application, and paste the keys at the appropriate location.

Note: You can also drag the selected keys to the new application.

Copying keys as font text characters

1. Open the appropriate script.

2. Select the keys you want to copy. To select all the keys, click **Edit > Select All**.

3. Click **Edit > Copy As Font**.

4. Switch to the other application, and paste the characters at the appropriate location.

In some applications, the pasted characters may be shown in the font that is in effect at that location. So they may not look anything like calculator keys.

5. If necessary, apply the TI73EmuKeys font to the characters.

Note: The script icons for text points, delays, pauses, and Go To Home commands cannot be copied as font text characters. They are ignored when you paste the copied characters into the other application.

Locating common scripts

If you have access to scripts written by other people, you can open and play those scripts on your own computer. Texas Instruments provides a number of scripts that perform commonly used operations.

- Run the TI-SmartView™ installation CD, which runs automatically when you insert it into the CD drive. Click the **activities and tutorials** tab on the displayed screen. Most of the listed items are scripts that you can save to your computer.
- Check the Texas Instruments web site at education.ti.com.

By using available scripts and viewing their content, you can get ideas about how to create additional scripts for automating your own operations.

FAQs and keyboard shortcuts


Frequently asked questions

I clicked on the calculator screen to select an option, but nothing happened. Why?

On the calculator image in the TI-SmartView™ Emulator, use the mouse to click keys the same as you would use your finger to press keys on a real TI-73 Explorer™ calculator. And just like on a real calculator, you can't press the screen to select an option, even though it's very tempting on a computer. You must click the same keys you would press on the calculator.

I'm having trouble editing a script. How do I figure out where I need to be in the script to make a change?

Because scripts record key presses, it might be easier to step through the

script by clicking  on the script toolbar or to change the script's playback speed so that you can see exactly where you need to make the change.

The TI-SmartView™ Emulator calculator is too big for my computer screen. How do I change the size?

Click **View > Size** and then select a smaller size.

Some keys show a in the key press history or in a script. What does that mean?

When you hold down an arrow key for more than a certain amount of time, the cursor begins to scroll. The key that starts this scrolling feature has a clock icon attached to it. For example:



The amount of scrolling represented by this single key icon is equivalent to clicking the key multiple times. If you run a script that contains one of these keys, TI-SmartView™ Emulator reproduces the equivalent number of key presses.

Using the computer keyboard

You can use the computer keyboard to enter data into the TI-SmartView™ for the TI-73 Explorer™ emulator software. However, the keyboard *does not* work the same as using the TI Keyboard with a calculator. You cannot simply use the keys like a QWERTY keyboard to type A through Z.

Press F6 on the computer keyboard to access second functions on the emulator software. For example, to access MODE on the emulator, press **F6 Shift+M** on the keyboard.

To enter text, press **F6 Shift+T**. The TI-73 Explorer™ text menu displays. Use the arrow keys to highlight a letter, and press Enter to choose the letter. When you are finished, highlight **Done** and press Enter.



Shortcut mode

The TI-SmartView™ for the TI-73 Explorer™ emulator software has the following keyboard shortcuts.

$\boxed{Y=}$ [F1]	$\boxed{\text{WINDOW}}$ [F2]	$\boxed{\text{ZOOM}}$ [F3]	$\boxed{\text{TRACE}}$ [F4]	$\boxed{\text{GRAPH}}$ [F5]
$\boxed{\leftarrow}$ Left Arrow	$\boxed{\downarrow}$ Down Arrow	$\boxed{\uparrow}$ Up Arrow	$\boxed{\rightarrow}$ Right Arrow	$\boxed{2\text{nd}}$ [F6]
$\boxed{\text{MODE}}$ Shift + M	$\boxed{\text{DEL}}$ Delete	$\boxed{\text{MATH}}$ Shift + T	$\boxed{\text{DRAW}}$ Shift + D	$\boxed{\text{LIST}}$ Shift + L
$\boxed{x^2}$ Shift + Q	$\boxed{\wedge}$ ^	$\boxed{\text{PRGM}}$ Shift + P	$\boxed{\text{APPS}}$ Shift + A	$\boxed{\text{CLEAR}}$ Backspace
$\boxed{\text{UNIT}}$ Shift + U	$\boxed{\text{D/C}}$ Shift + B	$\boxed{\text{F}\leftrightarrow\text{D}}$ Shift + F	$\boxed{\text{A}\leftrightarrow\text{D}}$ Shift + E	$\boxed{\text{CONST}}$ Shift + C

SIMP Shift + S	% %	(())	÷ /
x Shift + X	7 7	8 8	9 9	× *
, ,	4 4	5 5	6 6	- -
STO▶ Shift + N	1 1	2 2	3 3	+ +
ON Shift + O	0 0	. .	(-) -	ENTER Enter

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