



# TI Connect™ CE Software

This guidebook applies to version 5.3. To obtain the latest version of the documentation, go to [education.ti.com/go/download](https://education.ti.com/go/download).

# Legal Information

## ***Important Information***

Texas Instruments makes no warranty, either expressed or implied, including but not limited to any implied warranties of merchantability and fitness for a particular purpose, regarding any programs or book materials and makes such materials available solely on an “as-is” basis.

In no event shall Texas Instruments be liable to anyone for special, collateral, incidental, or consequential damages in connection with or arising out of the purchase or use of these materials, and the sole and exclusive liability of Texas Instruments, regardless of the form of action, shall not exceed the purchase price of this product. Moreover, Texas Instruments shall not be liable for any claim of any kind whatsoever against the use of these materials by any other party.

This graphing product application (APP) is licensed. See the terms of the license agreement.

© 2006 - 2017 Texas Instruments Incorporated

Windows, NT, Microsoft, Apple, and Macintosh are trademarks of their respective owners.

# Contents

|  |           |
|--|-----------|
| <b>Legal Information</b> .....                                       | <b>ii</b> |
| <b>What's New</b> .....  | <b>1</b>  |
| What's New in TI Connect™ CE Software v5.3 .....                     | 1         |
| Program Editor .....   | 1         |
| <b>Introduction to the TI Connect™ CE Software</b> .....             | <b>2</b>  |
| <b>Using the TI Connect™ CE Software</b> .....                       | <b>3</b>  |
| Parts of the TI Connect™ CE Software .....                           | 4         |
| <b>Using the Screen Capture Workspace</b> .....                      | <b>6</b>  |
| Parts of the Screen Capture Workspace .....                          | 7         |
| Capturing and Using Screens .....                                    | 7         |
| Saving Calculator Screens as Files .....                             | 8         |
| Dragging and Dropping Screen Captures to Computer Applications ..... | 10        |
| <b>Using the Calculator Explorer Workspace</b> .....                 | <b>11</b> |
| Parts of the Calculator Explorer Main Workspace .....                | 12        |
| Selecting a Connected Calculator .....                               | 13        |
| Copying Calculator Files to the Computer .....                       | 13        |
| Sending Files to Connected Calculators .....                         | 13        |
| Converting and Sending Background Images .....                       | 14        |
| Sending a Background Image to a Connected Calculator .....           | 16        |
| Data Import .....  | 17        |
| Deleting Calculator Files .....                                      | 18        |
| <b>Using the Program Editor Workspace</b> .....                      | <b>19</b> |
| Parts of the Program Editor Workspace .....                          | 20        |
| Creating a New Program .....   | 22        |
| Editing a Var Name .....   | 23        |
| Protecting Your Program .....  | 23        |
| Saving a Program to Your Computer .....                              | 23        |
| Closing a Program .....  | 23        |
| Using the Catalog Panel .....  | 24        |
| Using the Syntax Reference Panel .....                               | 28        |
| HUB menu for TI-Innovator™ and TI-Innovator™ Rover .....             | 28        |
| Sending a Program to a Calculator .....                              | 28        |

|   |           |
|---|-----------|
| <b>Maintaining Your Calculator</b> .....                                      | <b>31</b> |
| Updating the Calculator Operating System .....                                | 31        |
| TI CE Bundle file – use one computer file to update your CE calculator! ..... | 32        |
| Getting Calculator Information .....  | 34        |
| Compatibility with Graphing Calculators .....                                 | 34        |
| <b>General Information</b> .....  | <b>35</b> |
| Texas Instruments Support and Service .....                                   | 35        |
| Service and Warranty Information .....  | 35        |

# What's New

## ***What's New in TI Connect™ CE Software v5.3***

### **TI CE Bundle file – use one computer file to update your CE calculator!**

Update your connected CE calculator(s) in one step using TI Connect™ CE and the new TI CE Bundle downloaded from [education.ti.com](http://education.ti.com). This is an alternative way to update your calculator in one step.

[See more](#)

---

### ***Program Editor***

#### **HUB menu for TI-Innovator™ and TI-Innovator™ Rover**

Program Editor supports the TI-Innovator™ HUB menu for TI-Innovator™ and TI-Innovator™ Rover commands. The HUB menu is located in the Program menu in the catalog tree.

[See more](#)

---

#### **New Command**

- `piecewise()` command has been added to the TI Connect™ CE catalog tree in Math>Math and also in Catalog. This command supports the new piecewise function graphing template in CE OS 5.3.

For more information about the new and updated commands, go to the TI-84 Plus CE Reference Guide at [education.ti.com/go/download](http://education.ti.com/go/download).

# Introduction to the TI Connect™ CE Software

The TI Connect™ CE software makes exchanging information between your graphing calculator and your computer quick and easy.

Supports any TI-8x graphing calculator with a USB port, which include:

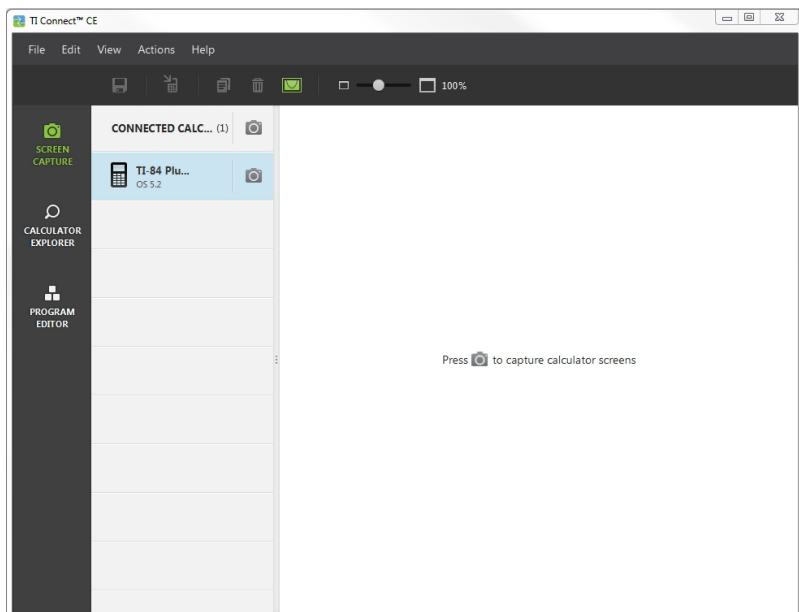
- TI-84 Plus CE
- TI-84 Plus CE-T
- TI 84 Plus C Silver Edition
- TI-84 Plus
- TI-84 Plus T
- TI-83 Premium CE
- TI-83 Plus.fr
- TI-82 Advanced

**Note:** Use TI Connect™ 4.0 which supports calculators with an I/O port only:

- TI-83 Plus
- TI-89 Titanium
- Voyage™ 200
- TI-73 Explorer™

# Using the TI Connect™ CE Software

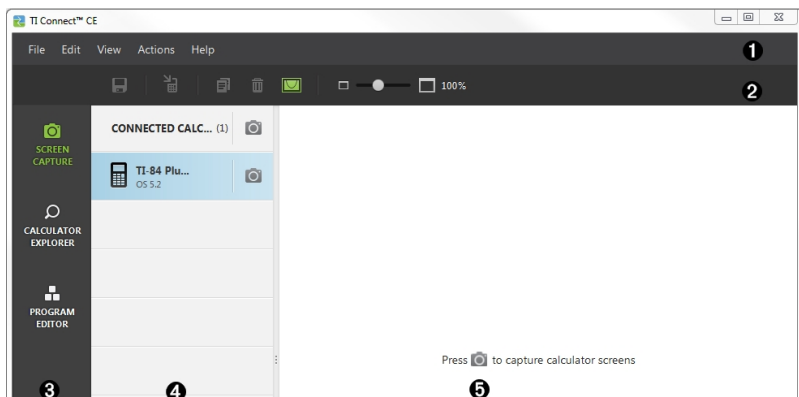
The TI Connect™ CE software contains tools you can use to exchange information between your calculator and your computer.



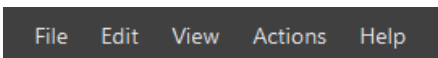
The TI Connect™ CE software includes three workspaces:

- **Screen Capture:** allows you to manage screen captures
- **Calculator Explorer:** allows you to manage calculator content
- **Program Editor:** allows you to manage TI Basic programs

## Parts of the TI Connect™ CE Software



- 1** **Menu Bar** - Use these menus to manage calculator files and screens to view calculator information, and to get help.



- 2** **Toolbar** - Use these icons to manage computer files and screens.

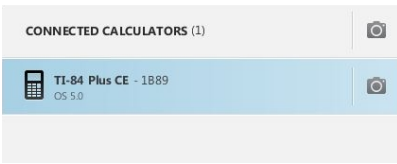


- 3** **Workspace Panel**- Use this panel to select workspaces (Screen Capture, Calculator Explorer, and Program Editor).

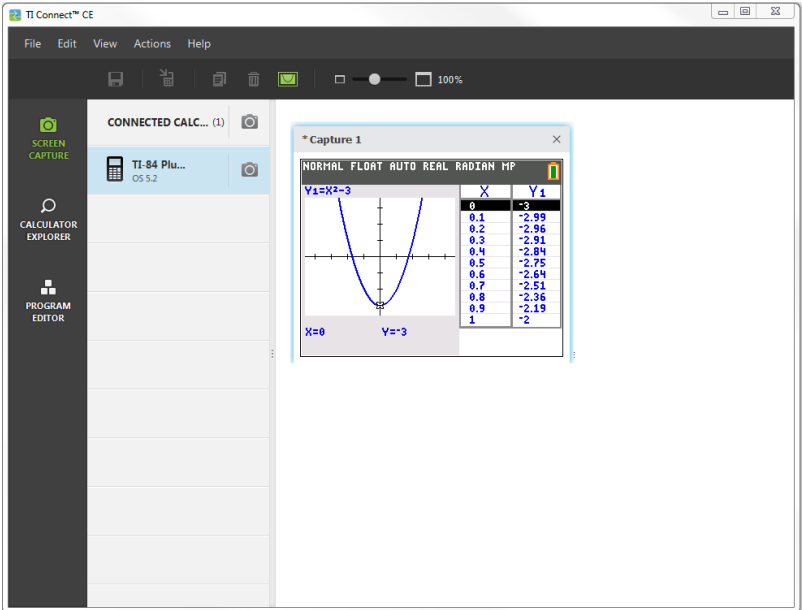


- 4** **Calculator List Panel** - Use this list to view all connected calculators and to select one calculator for display.





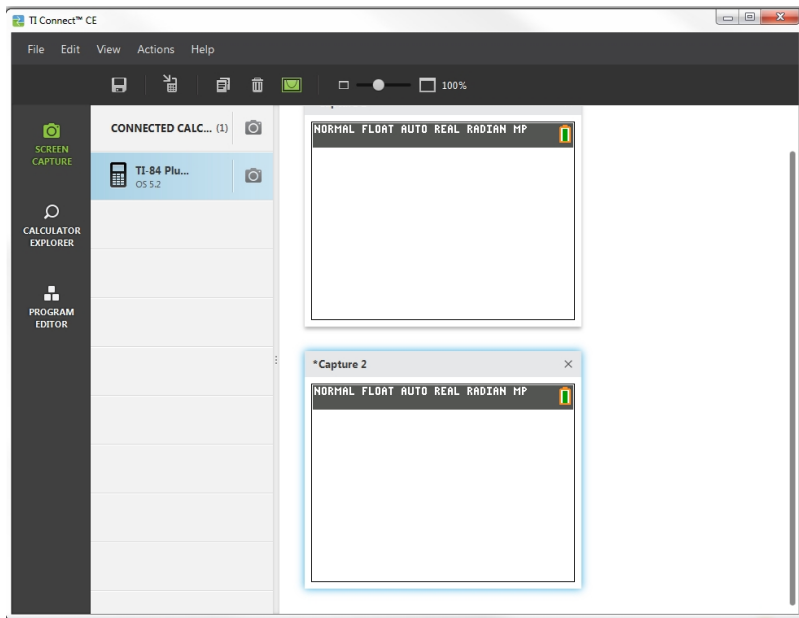
- 5 **Content Panel** - Use this panel to view and manage the calculator files and screen on connected calculator(s).



**Note:** You can complete most of the actions in these menus by dragging and dropping items to your connected calculator or computer.

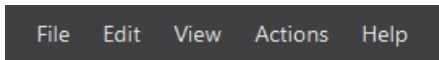
# Using the Screen Capture Workspace

The Screen Capture workspace allows you to manage calculator screen captures.



## Parts of the Screen Capture Workspace

**Menu Bar** - Use these menus to manage files and images, to view calculator information, and to get help.



**Note:** You can complete most of the actions in these menus by dragging and dropping items from the Content Panel.

**Toolbar** - Click these icons to save, send, copy, delete, and resize files.



- 
- ① Save a file to the computer.

---

  - ② Send a file to a calculator.

---

  - ③ Copy a file.

---

  - ④ Delete a file.

---

  - ⑤ Add or remove a border from all captured screens.

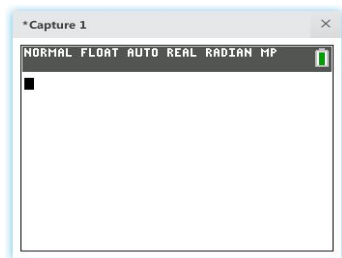
---

  - ⑥ Change the size of all captured screens.

---

  - ⑦ View the screen capture size.
- 

**Content Panel** - View screen captures in the Content Panel.





## Capturing and Using Screens

In the Screen Capture workspace, you can capture and view screens from your calculator.

## Before you Begin

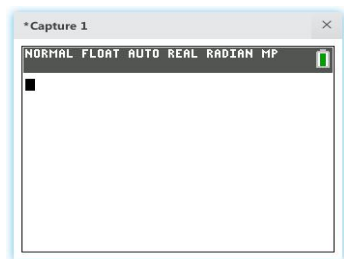
Connect the calculator to the computer and make sure it appears in the Calculator List Panel.

### To Capture Calculator Screens

1. On the TI Connect™ CE software Workspace Panel, click the **Screen Capture** workspace.
2. Display the screen on your calculator that you want to capture.
3. Click  next to the desired calculator in the Calculator List Panel.
  - If more than one calculator is connected, click on  next to **CONNECTED CALCULATORS** to capture screens from all calculators.


### Saving Calculator Screens as Files

The Screen Capture workspace lets you save captured or existing images from your calculator as a PNG.




**Note:** The asterisk at the beginning of an image name indicates that the image is not saved.

### To save an existing screen

1. Click the captured screen in the Content Panel.
2. Click .


### To save multiple screens

1. Click **Edit > Select All**.
2. Click .

### To rename a screen capture

1. Place your cursor at the beginning of the screen name field.  
Ex: Capture 1.
2. Double-click the name to select it.
3. Type in a new name for the computer file.


## To save a new screen capture as a PNG file

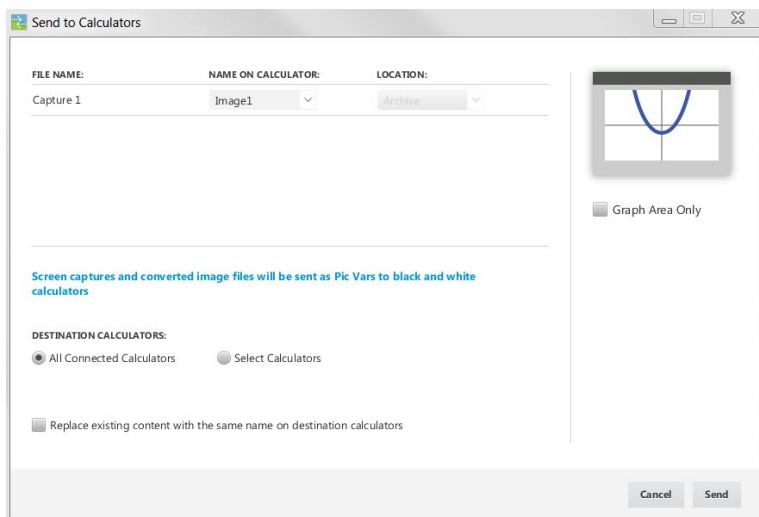
1. Click the image.
2. Click .
3. Navigate to a desired save location.
4. Use the default file name or type a new file name.

5. Click .

## To send screen captures to connected calculators

This Screen Capture only feature provides a way to take a screen capture of a graph on the high resolution calculators, crop to the graph area and then convert only the graph area to a Background Image. Check **Graph Area Only** to create this type of Background Image.

1. If you have not already done so, capture the screen.
2. Click the screen capture to select it.
3. Click .



- **FILE NAME:** This may differ from the **NAME ON CALCULATOR** depending on what you named the screen capture on your computer.
- **NAME ON CALCULATOR:** select the background image (it should be the default, but you may change the background image name using this menu).

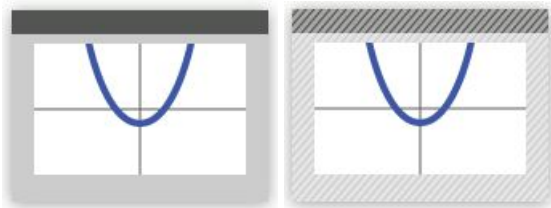
**Note:** Screen captures and converted image files will be sent as Pic Vars to gray scale calculators.

- **GRAPH AREA ONLY:** In the right panel, select whether you want to send just the graph area, or the entire screen. When sending a screen capture back to a calculator, it is best to send the graph area only.

### Cropping an Image

A screen capture of the graph area includes the full screen of the TI-84 Plus CE, status bar, graph border, and the graph area.

TI Connect™ CE software allows you to crop the image to a Graph Area Only size to create a Background Image Var. You can crop a screen to Graph Area only in the Send to in the Send to Calculators dialog box.



Graph Area Only

Graph Area Only

- **DESTINATION CALCULATORS:** Select whether you want to send the image to all connected calculators, or just selected calculators (from a check list).

### To send files to multiple calculators

1. Select the **Select Calculators** button on the dialog box.
2. Check the boxes to next to the calculators you want to select.
3. Click **Send**.

## ***Dragging and Dropping Screen Captures to Computer Applications***

Using the Screen Capture workspace, you can drag and drop captured screens into many computer applications. This feature lets you use calculator screens in your documents.

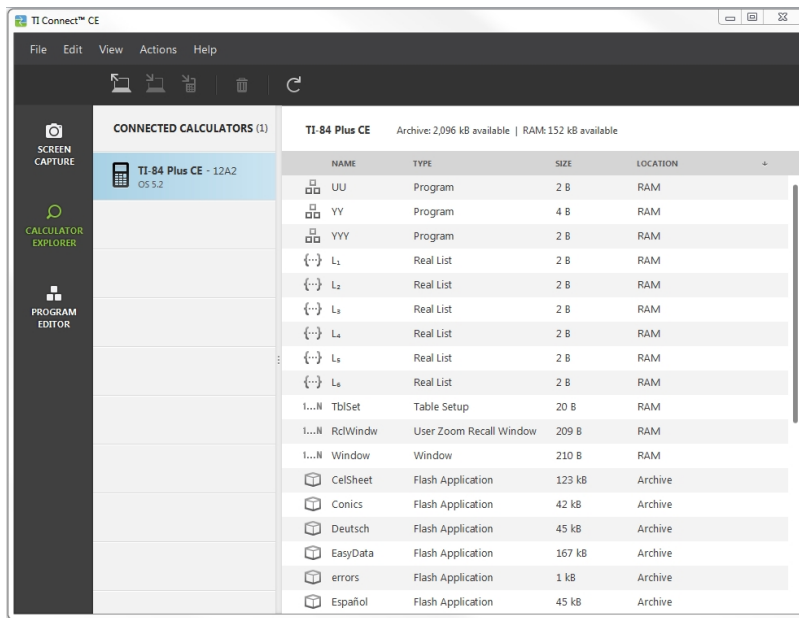
### To drag and drop screens into computer applications

1. Open or capture the screen.
2. Drag and drop the screen to an open document or presentation computer software application.

**Note:** You may also use **Edit>Copy>Paste** into an open document or presenter computer software application.

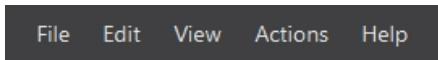
# Using the Calculator Explorer Workspace

Calculator Explorer workspace allows you to manage calculator content.



## Parts of the Calculator Explorer Main Workspace

**Menu Bar** - Use these menus to manage files and images, to view calculator information, and to get help.



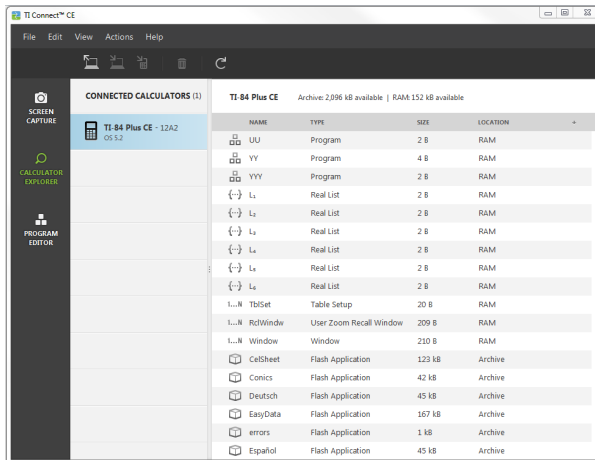
**Note:** You can complete most of the actions in these menus by dragging and dropping items from the Content Panel.

**Toolbar** - Click these icons to add, transfer, or delete files from your calculator.



- 1 Add content from your computer.
- 2 Send selected content to your computer.
- 3 Send selected content to another connected calculator.
- 4 Delete the selected file.
- 5 Refresh the view of a connected calculator's contents.

**Content Panel** - Select files you want to manage from this panel.





## Selecting a Connected Calculator

The TI Connect™ CE software allows you to simultaneously connect multiple calculators. Click on the calculator you want to work with to select it. The selected calculator becomes the default calculator for all TI Connect™ CE software actions.

### Before you Begin

Connect the calculator to the computer and make sure it appears in the Calculator List Panel.

## Copying Calculator Files to the Computer

You can copy most data, files, and programs from your calculator to your computer as a content backup, to send to others, or to free up calculator memory.

### To copy a file from the calculator to the computer

1. Click on the file name to select it.
2. Drag and drop the file into a folder on your computer or onto your desktop.


### To copy a file from the calculator to the computer as a content backup

1. Select **Edit**
2. Select **All**
3. Drag and drop the file into a folder on your computer or onto your desktop.

**Note:** There is no auto backup feature here.

Warning: Do not disconnect the cable during a transfer.

### To copy a file from the computer to the calculator


1. Navigate to the desired file on your computer.
2. Drag the file to the Calculator List Panel and hover over the desired calculator.
3. Release the mouse button when you see  **Copy**.
4. Select a file name from the drop-down menu. This will be the name of the file on your calculator.
5. Click **Send**.

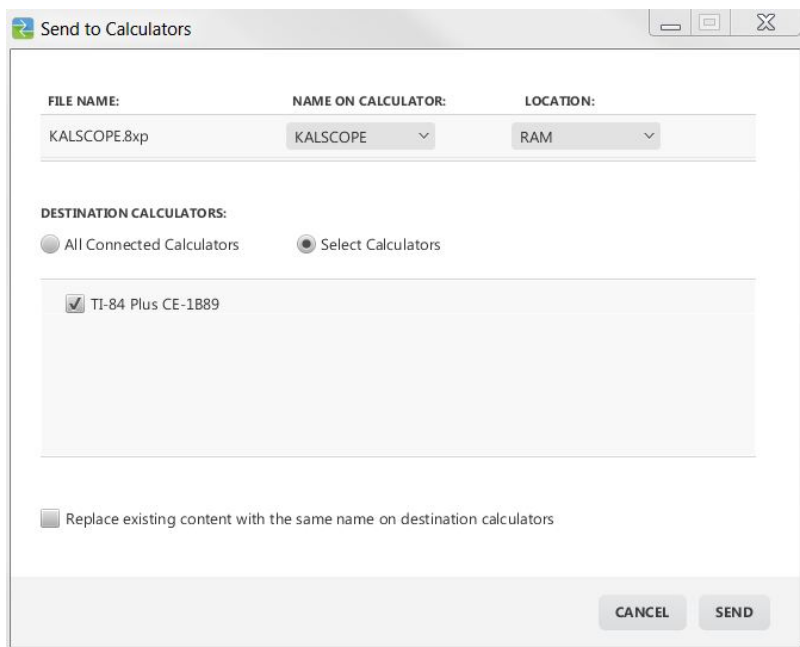
## Sending Files to Connected Calculators

You can send files to calculators connected to TI Connect™ CE software.

Warning: Do not disconnect the cable during a transfer.

### To send files to connected calculators

1. Click the file(s) in the Content Panel to select it.
2. Click .



- **DESTINATION CALCULATORS:** Select whether you want to send the file to all connected calculators, or just selected calculators (from a check list).

### To send files to select calculators

1. Select the **Select Calculators** button on the dialog box.
2. Check the boxes next to the calculators you want to select.
3. Click **Send**.

## Converting and Sending Background Images

The TI-84 Plus CE can display background images and Pic Vars. These variables display in the graph area.

**Note:** All information on background images also applies to the TI-84 Plus C Silver Edition and the TI-83 Premium CE.

### Working with Background Images

The TI Connect™ CE software automatically converts any image you send to a connected calculator into a Background Image Var. Your image may display differently in the graph area than you expect given the conversion to the pixel dimensions of 83 x 133.

**Note:** For best results, please edit your image to be proportional to 83 x 133 pixels prior to the conversion to 83 x 133 pixels.

The conversion to the Background Image Var uses 16-bit color.

You can also upload a Background Image Var into the TI-84 Plus CE emulator view in TI-SmartView™ CE software.

On the TI-84 Plus CE, a Background Image Var displays as the background in the graph area only. A background image will display scaled for the MODE screen settings of Full, Horizontal, and Graph-Table. This preserves any mathematical modeling done on a background. You cannot edit a background image while working on the TI-84 Plus CE. Background images run from and are stored in Archive memory.

## Sending a Background Image to a Connected Calculator

You can send a background image and display it in the graph area of the TI-84 Plus CE.

**Note:** All information on background images also applies to the TI-84 Plus CE-T, TI-84 Plus C Silver Edition, and the TI-83 Premium CE.



1. Open the TI Connect™ CE software.
2. Choose the Calculator Explorer workspace.
3. Connect the TI-84 Plus CE to the computer using the cable.
4. Turn on the TI-84 Plus CE.
5. Choose the image you want to convert.
6. Drag the picture to the Calculator List Panel and hover over the desired calculator.
7. Release the mouse button when you see **+ Copy**.
8. Select an Image# name from the drop-down menu (Image0 - Image9). This will be the name of the image on the TI-84 Plus CE.

**Note:** The Image# name you choose becomes the image name on your calculator. Note this Image# name (or make it part of the file name on your computer) for identification when you want to send or share this file.

**WARNING:** Pre-loaded images are stored in Image1 - Image5. Use other Image# to avoid overwriting the pre-loaded images.

9. Click **Send**.

**Note:** Rename the computer file so you can identify your Image Var later (bridge, fountain, etc.) The Image# internal calculator var name will not be changed.

**Note:** To save the background image to your computer, drag the Image# from the Calculator Explorer to your desktop or to the folder where you want to save it.

- To display your new background image in the graph area of the TI-84 Plus CE, press **[2nd]** **[format]** change the **Background** setting to the Image# you just sent to the calculator (example: Image5), and press **[graph]**.

**Note:** From the graph screen on the calculator, you can also change the Background using **[draw]**; **BACKGROUND**; **1:BackgroundOn** interactive command.

## Data Import

The Data Import feature lets you convert/send spreadsheet data saved as csv data files to the calculator as calculator list(s) or matrix file.

Access the Data Import feature from Calculator Explorer Workspace.

### Highlights:

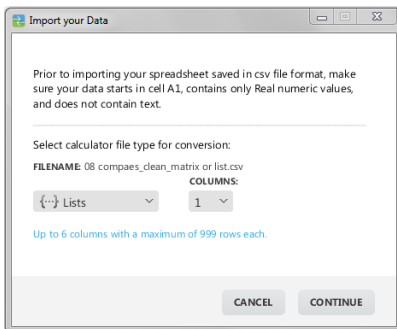
- Create (or download) a spreadsheet of data.
- Prior to import, edit data in your spreadsheet software to only allowed calculator numeric formats (specified below) for the import to a calculator file.

### About the spreadsheet

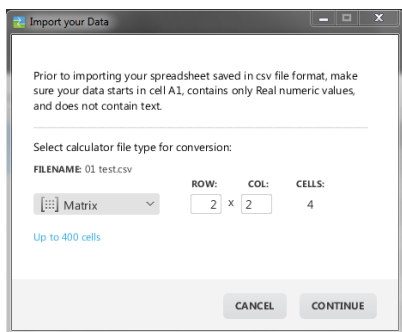
- **Only one spreadsheet** saved as a CSV (Comma Delimited) (\*.csv) file will be imported via Calculator Explorer workspace at a time.
- Spreadsheet (csv) file can be dragged into Calculator Explorer or imported via **Actions > Import Data (.csv) to List/Matrix...** menu.
- Up to 6 calculator lists or 1 matrix from the spreadsheet data will send to the connected calculator.

### Rules for preparing the spreadsheet for import:

- All cells must contain Real Number data as experienced on the calculator and no text.
  - Complex numbers are not supported for data import.
- Data must start in cell A1
- List(s) Import: If calculator lists are desired:



- Only six spreadsheet columns A-F will be imported
- Columns can be of length up to 999 cells.
- The first empty cell in a column will be interpreted as the end of the data for that list import
- Matrix Import: if calculator matrix is desired:



- Only one matrix can be imported from a spreadsheet file.
  - Up to 400 cells can be imported. (Example: row x col: 10 x 5 = 50 cells from row range 1-10, columns A-E.)
  - Dimension of matrix of the form (row x column) will be requested during the import experience in Calculator Explorer.
  - Any empty cell within the specified matrix dimension will be interpreted as 0.
- Do not have data in the spreadsheet outside of the allowed sizes for list(s) or matrix as described above. Otherwise, the file will be invalid when a data import to Calculator Explorer is attempted.


#### **To save calculator list(s) or matrix files**

- To save calculator files created to the computer, after import/send to calculator, drag the list(s) or matrix file from Calculator Explorer to the desired computer location.

### ***Deleting Calculator Files***

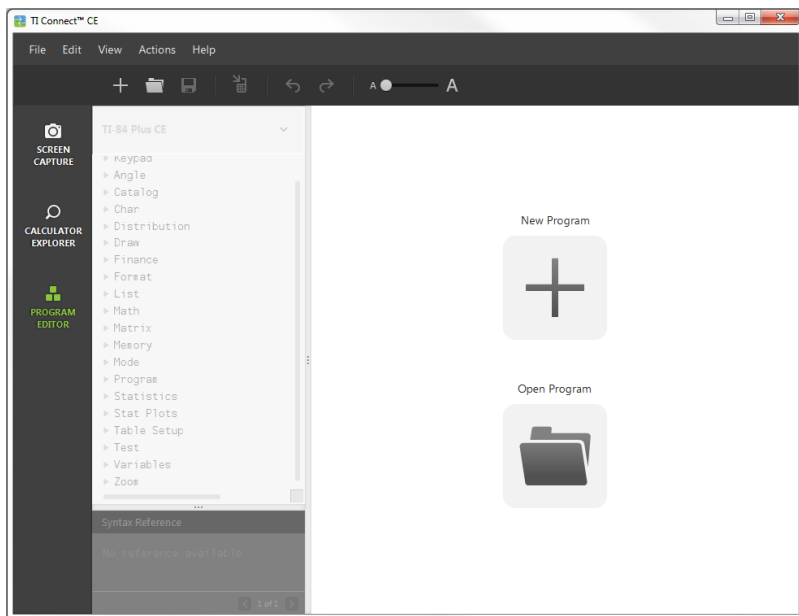
You can delete data, files, and programs from your calculator.

#### **To delete files from the calculator**

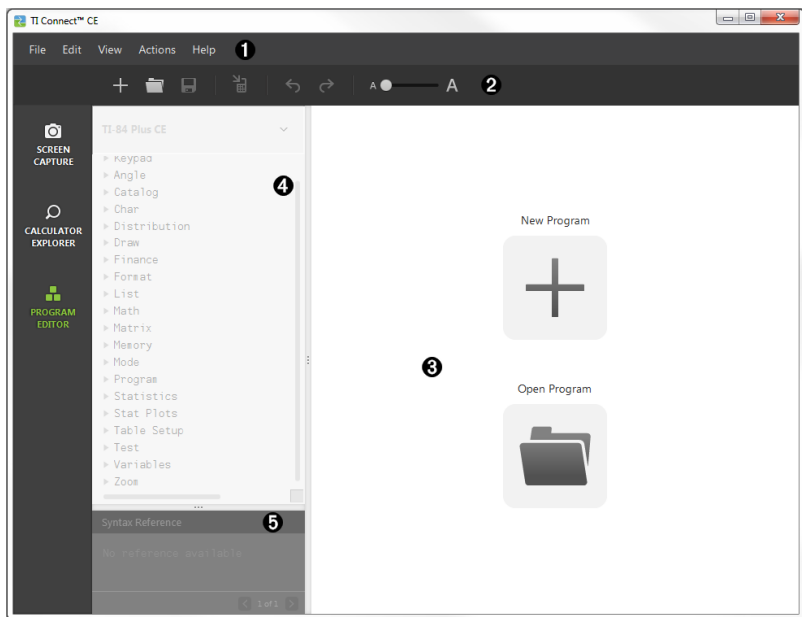
1. Click on the file in the Content Panel you want to delete.
2. Press .

# Using the Program Editor Workspace

The Program Editor Workspace allows you to work with TI Basic programs.



## Parts of the Program Editor Workspace



- 1** **Menu Bar** - Use these menus to manage files and programs, and to get help.

File Edit View Actions Help

**Note:** In the Program Editor Workspace, you can only drag and drop programs to the Content Panel.

- 2** **Toolbar** - Click these icons to **Create new program**, **Open program**, **Save program to computer**, **Send program to connected calculator(s)**, **Undo**, or **Redo** and **Font Size Slider**.



- 1** Create new program.
- 2** Open program.
- 3** Save program to computer.



---

④ Send program to connected calculator(s).

---

⑤ Undo or Redo.

---

⑥ Font Size Slider to increase or decrease the size of text in:

- Catalog Panel
- Program Editor

---

---

③ **Content Panel** - Use this panel to create, view, and edit programs.

New Program



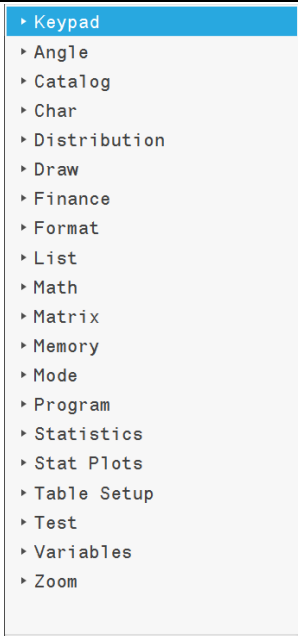
Open Program



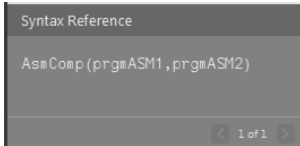
---

④ **Catalog Panel** - Use this panel to select your calculator type and then choose from the catalog tree list (by category) to create programs.

---



- 5** **Syntax Reference Panel** - Use this panel to view the proper syntax of each command along with required and optional arguments.



## Creating a New Program

When no programs are open, the Content Panel displays only the New Program and Open Program icons.

### To create a new program

- ▶ Click the **New Program** icon.



### To open an existing program

1. Click the **Open Program** icon.
2. Navigate to the appropriate folder.
3. Click **Open**.



## ***Editing a Var Name***

New program names are PROG##. The numbers run in sequence, ex: PROG01, PROG02.

### **To change the program name**



- ▶ Click inside the **Var Name** box and type in a new name up to 8 letters or numbers (first cannot be a number.)

VAR NAME:

## ***Protecting Your Program***

TI Connect™ CE software allows you to protect your program from being edited after the program is sent to a connected calculator.


### **To protect your program**

- ▶ Click the check box next to the lock icon.  

## ***Saving a Program to Your Computer***

The asterisk at the beginning of a program name indicates that the program is not saved.

### **To save a program**

1. Click .
2. Navigate to the appropriate folder.
3. Click **Save**.

## ***Closing a Program***

### **To close a program**

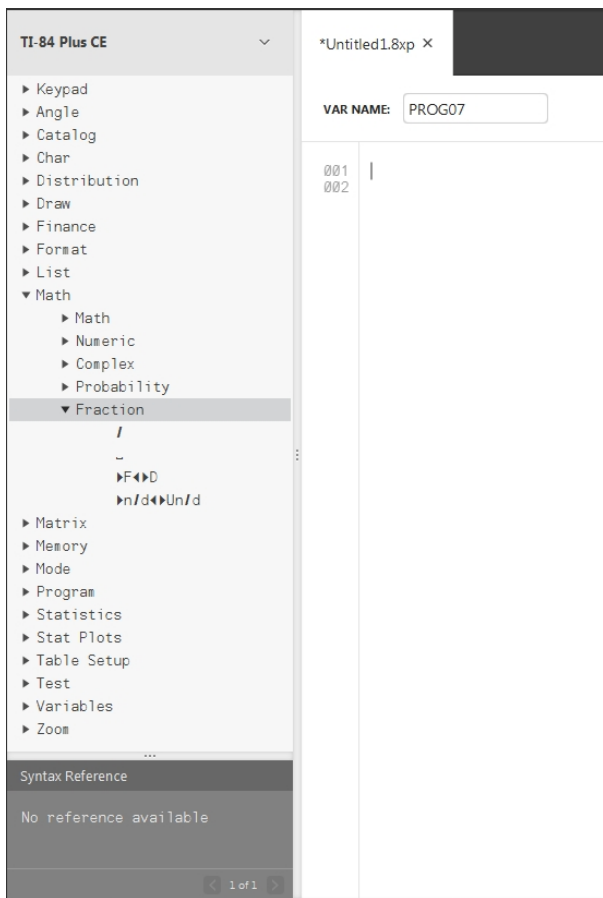
- ▶ Click the **x** by the program name.

## Using the Catalog Panel

The Catalog Panel contains a list of calculator commands, functions, variables, and symbols you can use to create programs.

### To expand or collapse a Catalog level

- ▶ Click the triangle beside each Catalog entry.



### To place a Catalog entry in the Content Panel

- ▶ Drag and drop the Catalog entry into the Content Panel. This places the cursor in the program editor command line after the item is dropped.

-OR-

- ▶ Double-click the Catalog entry. This pastes the item to the program editor and the focus remains in the Catalog Panel to select another item. Click back at the end of the command line to continue typing in the editor.

### To avoid Syntax errors

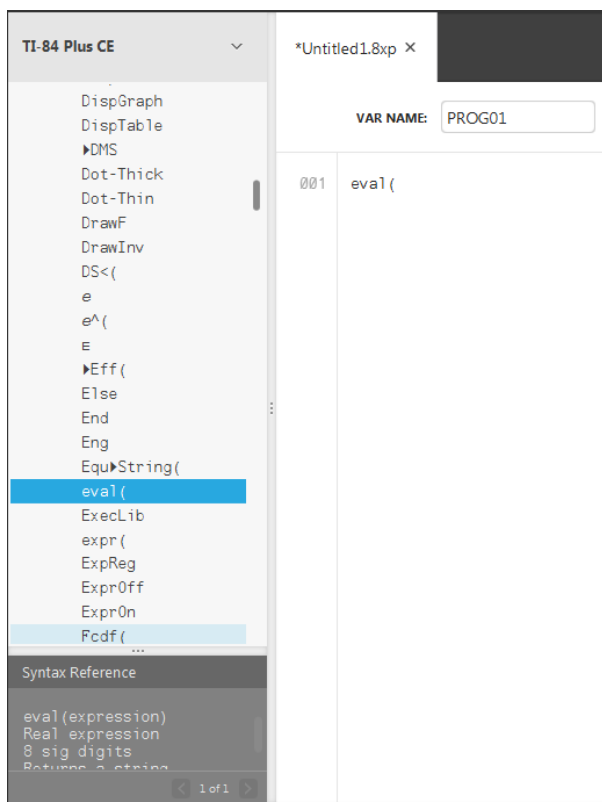
Use the catalog of commands and symbols to paste to the editor to avoid syntax errors due to the incorrect use of upper and lower case in commands.

#### Example:

Did you type Eval( or eval(?

Did you type sin( or Sin(?

The catalog tree list pastes the correct case and space formatting.



### Extra Space Syntax Errors

#### Running a Program on a Calculator

Extra spaces can cause a Syntax error when a program is runs on the calculator.

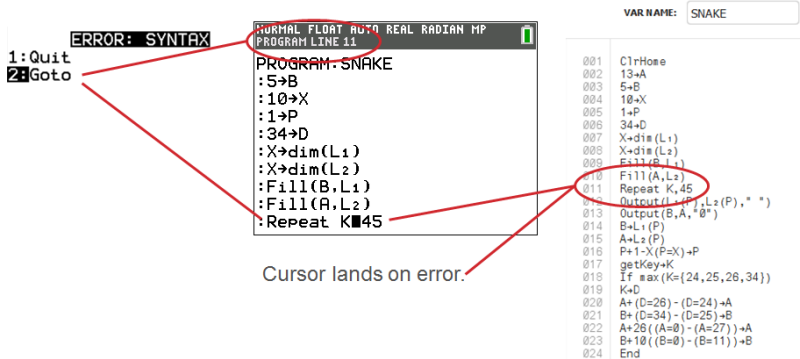
## Where are the extra spaces?

You can see extra spaces in your program using TI Connect™ CE Program Editor by selecting the entire program. Extra spaces at the end of command lines should be deleted prior to sending the program to the calculator.

```
VAR NAME: SNAKE

001 C1rHose
002 13→A
003 5→B
004 10→X
005 1→P
006 34→D
007 X→dim(L1)
008 X→dim(L2)
009 Fill(B,L1)
010 Fill(A,L2)
011 Repeat K=45
012 Output(L1(P),L2(P),* *)
013 Output(B,A,"0")
014 B→L1(P)
015 A→L2(P)
016 P+1-X(P=X)→P
017 getKey→K
018 If max(K={24,25,26,34})
019 K→D
020 A+(D=26)-(D=24)→A
021 B+(D=34)-(D=25)→B
022 A+28((A=0)-(A=27))→A
023 B+10((B=0)-(B=11))→B
024 End
025
```

When the program runs in the calculator, if there are extra spaces, selecting **Goto** from the syntax error screen will place the cursor on the program line where the error occurred. Check the line for correct syntax and extra spaces at the end of the command line.



- Move cursor to the end of that command line.
- Carefully delete extra spaces.

**Note:** There is no undo on the calculator.

```

NORMAL FLOAT AUTO REAL RADIAN MP
PROGRAM LINE 7
PROGRAM: SNAKE
:ClrHome
:13→A
:5→B
:10→X
:1→P
:34→D
:X→dim(L1
:X→dim(L2)
:Fill(B,L1)
  
```

```

NORMAL FLOAT AUTO REAL RADIAN MP
PROGRAM: SNAKE
:ClrHome
:13→A
:5→B
:10→X
:1→P
:34→D
:X→dim(L1)
:X→dim(L2)
:Fill(B,L1)
  
```

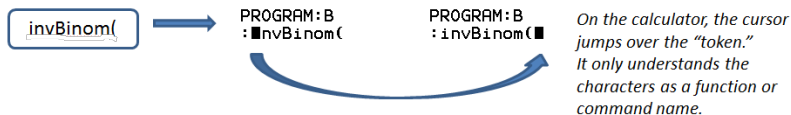
### When Do Commands Become Calculator Commands (Tokens)?

The commands do not become calculator commands (tokens) until the program is sent to the calculator.

If there is an error when your program sends to the calculator or runs on the calculator, check to see if every command in the calculator program edit mode is actually a command token.

#### How Do You Know?

When a command is a token on the calculator, the cursor will be on the first character and then jump over the command as a token. If the cursor moves letter-by-letter through a command, that command did not get converted. Delete and paste the command from the calculator.



**Reminder:** When entering a program directly on the calculator, the command or function pastes completely as a token.

**Warning:** Some calculator commands such as **LEFT**, **CENTER**, **RIGHT**, **FRAC**, are words you might use in a string. If a word you use in a string is the same as a calculator command, your word will become a calculator token and may give errors in your program. Avoid using words or parts of words that are the same as a TI-Basic command to avoid unintentional tokenization to a command.

**Warning:** The language setting of TI Connect™ CE determines how the text is interpreted as a command token for the calculator. Opening programs and sending back to the calculator with TI Connect™ CE in different languages may result in:

- undesired command tokens and/or
- syntax errors

## Using the Syntax Reference Panel

The Syntax Reference Panel displays the syntax of each Catalog entry, including required and optional arguments.

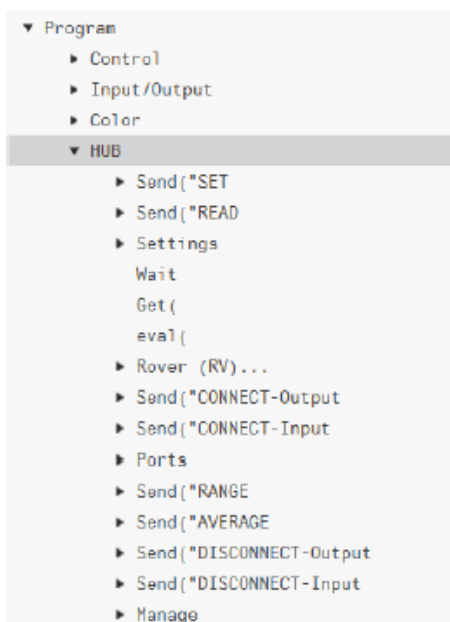


## HUB menu for TI-Innovator™ and TI-Innovator™ Rover

Program Editor supports the TI-Innovator™ HUB menu for TI-Innovator™ and TI-Innovator™ Rover commands. The HUB menu is located in the Program menu in the catalog tree. This HUB menu addition to the TI Connect™ CE Program Editor is the same HUB menu experience as when the Hub App is loaded on the CE calculator. Please always use the latest versions of the CE OS and CE Hub App.

### See Also:

Using the Catalog Panel  
Sending a Program to a  
Calculator



## Sending a Program to a Calculator

You can send a program to a connected calculator.

### To send a program to a connected calculator

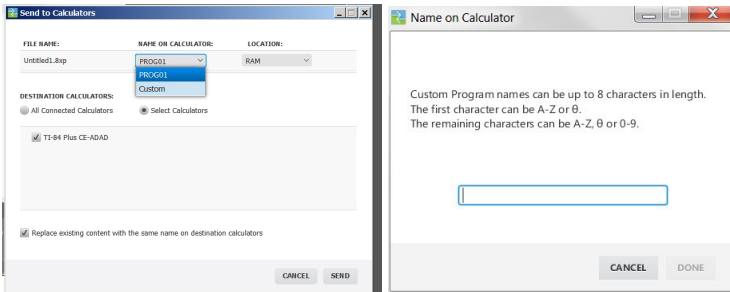
1. If you have not already done so, save the program.





2. Click

- **FILE NAME:** This may differ from the **NAME ON CALCULATOR** depending on what you named the program on your computer.
- **NAME ON CALCULATOR:** select the program name (it should be the default, but you may change the program name by clicking **Custom**).



- **LOCATION:** Choose whether you save the program in the calculator's RAM or Archive.
- **DESTINATION CALCULATORS:** Select whether you want to send the program to all connected calculators, or just selected calculators (from a check list).

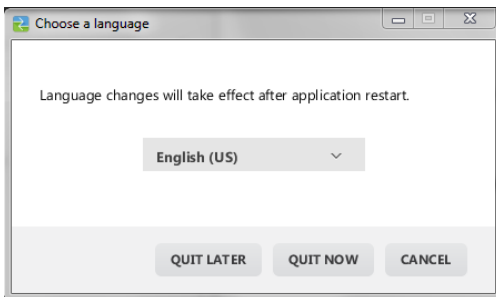
### To send programs to multiple calculators

1. Select the **Select Calculators** button on the dialog box.
2. Check the boxes to next to the calculators you want to select.
3. Click **Send**.

### Language Settings

If you wish to develop a TI-Basic program in a language different than your computer OS language setting, you can re-launch TI Connect™ CE in another language.

1. Select **File > Change Language**.
2. Select the language change after restart of the application.



- **QUIT LATER** - Retains the language selected and TI Connect™ CE will launch in this selected language the next time TI Connect™ CE is launched.
- **QUIT NOW** - Closes the software app. TI Connect™ CE will launch in this selected language the next time TI Connect™ CE is launched.
- **CANCEL** - No language change. Computer OS language will be the default.

# Maintaining Your Calculator

## Updating the Calculator Operating System

TI Connect™ CE software lets you download operating systems for graphing calculators.

### Before you begin

- Backup your calculator files (RAM, Archive, and Apps).
- Make sure your calculator is turned on and securely connected to the computer.
- If you have multiple calculators connected with USB computer cables, OS transfers can occur to specific calculators.

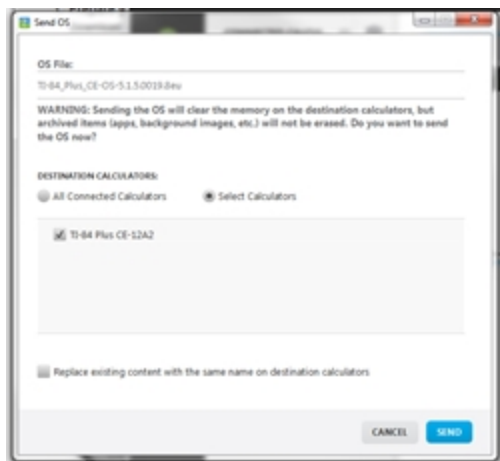
This can be done by selecting the specific calculators in the Send dialog.

Warning: Do not disconnect the cable during a transfer.

### To update graphing calculator operating systems

1. Click **Actions > Send OS**.
2. Navigate to the correct OS file for your model of calculator stored on your computer.
3. Click **Open..**

The Send OS dialog box opens.



4. Select from **Destination Calculators**:

#### DESTINATION CALCULATORS:

All Connected Calculators

Select Calculators

TI-84 Plus CE-12A2

SEND

5. Press Send

### ***TI CE Bundle file – use one computer file to update your CE calculator!***

Update your connected CE calculator(s) in one step using TI Connect™ CE and the new TI CE Bundle downloaded from [education.ti.com](http://education.ti.com). Always download the latest TI CE Bundle at [education.ti.com](http://education.ti.com).

Connect your CE calculator(s) to TI Connect™ CE. Drag the appropriate TI CE Bundle to Calculator Explorer.

- TI-84 Plus CE/CE-T: TI84CEBundle-5.3.0.xxxx.b84
- TI-83 Premium CE: TI83CEBundle-5.3.0.xxxx.b83

TI Connect™ CE will update your CE OS, any CE Apps that need to be updated or are missing from your calculator(s) and also load the 5 pre-loaded Image Vars to Image1 – Image5. The process cannot be stopped so make sure to save off (drag off) any of your favorite calculator files using TI Connect™ CE Calculator Explorer. You can drag your favorite calculator files back to your calculator after the new TI CE Bundle process completes.

Drag the CE Bundle to Calculator Explorer. Please wait until the complete process finishes. Do not pull the cable during any file transfer. Expect the CE calculator to reboot prior to the Image Var and Apps transfer. Expect the CE calculator to defragment (rearrange memory) at some time during the process. Messages display when transfers take place on the TI Connect CE window.

**Note:** Do not confuse the TI CE Bundle file with the CE OS and CE Apps file still available to download separately on [education.ti.com](http://education.ti.com). The TI CE Bundle contains all the latest files you need to update or restore your CE calculator(s) as though you just bought your calculator and provides a fast way to update your class set CE calculator (s).

**Important:** If the CE calculator screen says "**Waiting...**" the calculator has lost the OS. This can happen if a cable is pulled from the calculator or computer during a file transfer. If connected, disconnect and reconnect the CE to the computer. Drag the CE Bundle to Calculator Explorer.

**Reminder:** Wait until the complete process finishes. Do not pull the cable during any file transfer. Expect the CE calculator to reboot prior to the Image Var and Apps transfer. Expect the CE calculator to defragment (rearrange memory) at some time

during the process. Messages display when transfers take place on the TI Connect CE window.

You may repeat this process and the CE Bundle will transfer the files again. Do not pull the cable during any file transfer.

**See Also:**

Updating the Calculator Operating System

Sending Files to Connected Calculators

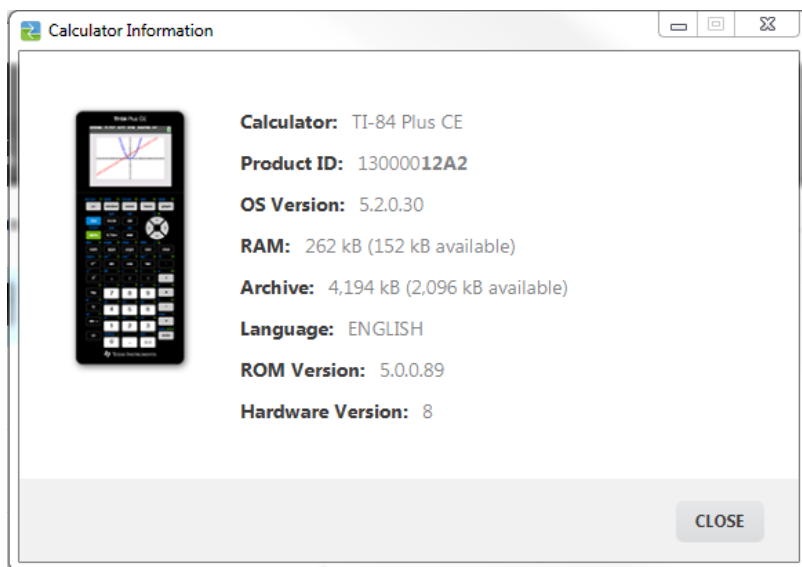
## Getting Calculator Information

TI Connect™ CE software allows you to get information about your calculator's type, product ID, OS Version, RAM, Archive, Language, ROM Version, and Hardware Version.

**Note:** Calculator Information is available only from the Calculator Explorer Workspace.

### To view calculator information

- ▶ Click **View > Calculator Information**.



## Compatibility with Graphing Calculators

Please refer to the TI-84 Plus CE Getting Started Guide for compatibility with graphing calculators. Also see the TI-83 Premium CE Getting Started Guide.

**Note:** In general, TI-84 Plus CE graphing calculator files are compatible with other TI-84 Plus and TI-83 Plus models.

Apps, Operating Systems and some data files with unsupported numeric types do not share between models.

TI-Basic programs may need to be modified to correctly display on the high resolution color screen models.

## General Information

### *Texas Instruments Support and Service*

#### General Information: North and South America

|                                     |  |
|-------------------------------------|--|
| Home Page:                          | <a href="http://education.ti.com">education.ti.com</a>                                     |
| KnowledgeBase and e-mail inquiries: | <a href="http://education.ti.com/support">education.ti.com/support</a>                     |
| Phone:                              | (800) TI-CARES / (800) 842-2737<br>For North and South America and U.S.<br>Territories     |
| International contact information:  | <a href="http://education.ti.com/support/worldwide">education.ti.com/support/worldwide</a> |

#### For Technical Support

|                                       |   |
|---------------------------------------|---|
| Knowledge Base and support by e-mail: | <a href="http://education.ti.com/support">education.ti.com/support</a> or<br><a href="mailto:ti-cares@ti.com">ti-cares@ti.com</a> |
| Phone (not toll-free):                | (972) 917-8324  |

#### For Product (Hardware) Service

**Customers in the U.S., Canada, Mexico, and U.S. territories:** Always contact Texas Instruments Customer Support before returning a product for service.

#### For All Other Countries:

##### For general information

For more information about TI products and services, contact TI by e-mail or visit the TI Internet address.

|                   |  |
|-------------------|--|
| E-mail inquiries: | <a href="mailto:ti-cares@ti.com">ti-cares@ti.com</a>   |
| Home Page:        | <a href="http://education.ti.com">education.ti.com</a> |

### *Service and Warranty Information*

For information about the length and terms of the warranty or about product service, refer to the warranty statement enclosed with this product or contact your local Texas Instruments retailer/distributor.