

# Flash Software

This file provides important information about:

- Flash Software, including file types and descriptions
- Flash Software installation Instructions
- Localizing the TI-83 Plus or TI-83 Plus Silver Edition to view menus, prompts, functions, and error messages in a language other than English

## General Information about Flash Software

Flash software is a general term referring to any software that can be installed on a Flash-capable TI graphing calculator. Flash software can be Free or For Purchase.

Flash software can be downloaded from the web, from the TI Resource CD, or transmitted between calculators. Flash software can be upgraded, removed, and stored on a computer.

Flash software includes:

**Operating System (OS)** - A TI Flash-capable calculator cannot operate properly without the OS. The OS may be upgraded by downloading the current version.

**Calculator Software Application** - Supplementary software that can be installed and run on a TI Flash-capable graphing calculator. Applications may be downloaded, upgraded, and deleted.

**Certificate** - "Permission slip" for purchasing Flash software on the web, CD, and diskettes.

## **Free and For Purchase Flash Software**

**Free Flash Software** - You do not need to obtain a certificate for your calculator before installing free Flash software, such as language localization applications. To obtain free Flash software, you only need to copy the software to your computer from the web, a CD, or diskette, or it can be transmitted between calculators.

**For Purchase** - If the Flash software is for purchase, you need to obtain and install a certificate for your calculator before you can install the application. You can register your calculator and obtain a certificate from the web, a CD, or diskette. Copy the certificate and application to your computer and then install them on your calculator.

## Data File Types

Data file types are specific for each calculator. They are identified by the following file extensions.

Data File Types			
Calculator	Operating System	Applications	Certificates
TI-73	*.73u	*.73k	*.73q
TI-83 Plus and TI-83 Plus Silver Edition	*.8xu	*.8xk	*.8xq
TI-89	*.89u	*.89k	*.89q
TI-92 Plus	*.9xu	*.9xk	*.9xq

## For More Information

Detailed procedures about sending and receiving Flash software, and upgrading the operating system using TI-GRAPH LINK™ are described in the TI-GRAPH LINK guidebook on the TI Resource CD.

# Flash Software Installation Instructions

You must use TI-GGRAPH LINK software and the TI-GGRAPH LINK cable to install Flash software on your calculator.

If you need the TI-GGRAPH LINK software or a cable, go to the TI website: <http://www.ti.com/calc/docs/link.htm>

**Caution:** Do not attempt to install an application if a low-battery message appears on your calculator.

## Installing an Application Using Windows

1. Connect a TI-GGRAPH LINK cable between the Windows® computer and the calculator.

**Note:** If you have the gray TI-GGRAPH LINK cable, you may need to use the 25-pin to 9-pin adapter to connect to the computer. (The black cable, which works with Windows 95 or higher, has a built-in 9-pin connector.)

2. If the calculator is on, make sure it is on the home screen.
3. Start the TI-GGRAPH LINK software program.

4. From the TI-GGRAPH LINK menu bar, choose **Link > Send Flash Software > Applications and Certificates...** The Send Flash Software window displays.
5. Click the appropriate folders in the Directories field (and the Drives field, if necessary) to find and select the folder where the application was downloaded. The application(s) you can install are displayed in the File Name list.
6. Click the application name in the File Name field.
7. Click **Add** to copy the file name into the File Selected field.
8. Click **OK**. The Sending window displays the progress as the file(s) are sent to your calculator. The TI-GGRAPH LINK window displays when the installation is complete.
9. Click **OK** to return to the TI-GGRAPH LINK main screen.

## Installing an Application Using a Macintosh

1. Connect a TI-GGRAPH LINK cable between the Macintosh® computer and your calculator.

**Note:** If you have the gray TI-GGRAPH LINK cable, you may need to use a USB to serial port adapter to connect to the computer.

2. If the calculator is on, make sure it is on the home screen.
3. Start the TI-GGRAPH LINK 2 for Macintosh software program (version 2.2 or higher) and establish a connection to your calculator.
4. Choose **Connection** from the menu bar.
5. Click your calculator type in the list displayed.
6. Click **Connect**. The calculator window is displayed.
7. Drag the application file that you downloaded onto the calculator window. The Sending window displays the progress as the file(s) are sent to your calculator. The updated calculator window displays when the installation is complete.

## Localizing Your TI-83 Plus or TI-83 Plus Silver Edition

You can localize the TI-83 Plus or TI-83 Plus Silver Edition so that it will display menus, prompts, functions, and error messages in a language other than English.

**Note:** If you choose to reset **All RAM** or **Arc Vars**, the language is unaffected. If you reset **Apps** or **All Memory**, the language application is deleted and the language reverts to English.

### Localization Cross-Reference Table

Once localized, you can cross-reference the display items (strings) using the PDF files on the TI Resource CD. Use the Browse option in Utilities and go to Flash\83p\OS to access the localization cross-reference table.

The cross-reference tables are named pfigs.pdf and scand\_nl.pdf. The pfigs.pdf file contains a table with English, Portuguese, French, Italian, German, and Spanish. Scand\_nl.pdf contains a table with English, Danish, Norwegian, Swedish, Finnish, and Dutch.

You must have Adobe® Acrobat® Reader™ to view PDF files.

## Installing a Localization Application

Follow the Flash Software Installation Instructions on [page 4](#).

The localization files are on the TI Resource CD in the directory that contains the TI-83 Plus / TI-83 Plus Silver Edition operating system files. The path is Flash\83p\OS\(\language). Click on the desired language folder and choose a localization file.

These are the language abbreviations used to identify the language folders.

Abbreviation	Language	File Name
deu	Deutsch	Deutsch.8xk
dnk	Dansk	Dansk.8xk
esp	Español	Espanol.8xk
fin	Suomi	Suomi.8xk
fra	Français	Francais.8xk
hun	Magyar	Magyar.8xk
ita	Italiano	Italiano.8xk
nld	Nederlands	Nederlan.8xk
nor	Norsk	Norsk.8xk
pol	Polski	Polski.8xk
prt	Português	Portug.8xk
swe	Svenska	Svenska.8xk



## Running a Localization Application

1. On your TI-83 Plus / TI-83 Plus Silver Edition, press **[APPS]**. The **Applications** menu displays.
2. Press the number that corresponds to the language that you want to use.
3. To complete localization of your TI-83 Plus / TI-83 Plus Silver Edition, press **1**.

**Note:** The built-in Finance application is automatically localized. The CBL/CBR application and other applications that you may have installed may not be localized.

## Returning to English

1. On your TI-83 Plus / TI-83 Plus Silver Edition, press **[APPS]** to display the **APPLICATIONS** menu.



2. Press the number that corresponds to the localization language.



3. Press **2** to select English.

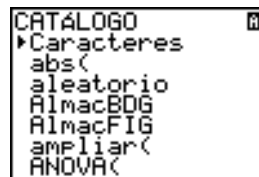
## Using the Special Character Set

After localization, a new item (**CHARACTER**) is added to the TI-83 Plus / TI-83 Plus Silver Edition **CATALOG**. This item accesses special characters and accent marks used in the languages that you chose for localization. You can use these special characters and accent marks for display messages and text strings that you want to store to a variable. You cannot, however, use them in variable names.

To select special characters and create accented characters

1. Press **[2nd]** **[CATALOG]** to display the **CATALOG**.

**Note:** **CHARACTER** is always the first item in the **CATALOG**.



2. Press **[ENTER]** to display the **CHARACTER** screen.  
A box appears around the first special character.

**Note:** Norwegian and Swedish language applications have a different **CHARACTER** screen.



To select special characters

- a) Press **[←]**, **[→]**, **[↓]**, or **[↑]** to move the box to the special character that you want to use in a message or text string.
- b) Press **[ENTER]** to place the character on the edit line.

To add accent marks to characters

- a) Press **[F1]**, **[F2]**, **[F3]**, **[F4]**, or **[F5]** to select the accent marks immediately above them.

- b) For uppercase characters, press **ALPHA**. For lowercase characters, press **ALPHA** **ALPHA**.
  - c) Press the key associated with the characters, for example, **ALPHA** [E] (above **SIN**) to place it on the edit line. The accented character appears on the edit line.
3. Press **←**, **→**, **↓**, or **↑** to move the box to **Done** and then press **ENTER** to paste the contents of the edit line to the previous screen.

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