## fx-CG Manager PLUS

## Subscription

(for Windows ${ }^{\circledR}$, for Macintosh)

## User's Guide



CASIO Worldwide Education Website http://edu.casio.com

Manuals are available in multi languages at
http://world.casio.com/manual/calc

## Getting Started

## About fx-CG Manager PLUS

- fx -CG Manager PLUS is an emulator that lets you perform fx-CG10/fx-CG20/fx-CG20 CN*/ fx-CG50/fx-CG50 AU/GRAPH90+ E operations on your computer.
* Windows only
- There are two types for fx-CG Manager PLUS: Type A and Type B. The calculators that are emulated depend on the type.
Type A: Emulates the fx-CG50, fx-CG50 AU, and GRAPH90+ E.
Type B: Emulates the fx-CG10, fx-CG20, and fx-GC20 CN.
- You can record key operations you perform on the emulator as "Key-Log records", and edit KeyLog records as required.
- The keys on the Key-Log editor screen as well as the emulator LCD screen contents can be pasted into other applications. This means that emulator data can be used to create assignments, tests, and other materials.
- A presentation feature lets you play back saved Key-Log records.


## $\square$ Using This Manual

- The operation examples shown in this manual all use the Type A fx-CG Manager PLUS. Type B operations are the same.
- For details about operation of the Graphic Scientific Calculator, see the user documentation that comes with the calculator.
- The procedures in this manual assume that you are already familiar with the following standard computer operations.
- Menu operations using the mouse, including: clicking, double-clicking, dragging, etc.
- Text input using the keyboard
- Icon operations, general window operations, etc.
- If you are not familiar with these types of operations, refer to the user documentation for your computer.
- The explanations in this manual cover both Windows and Mac OS. Most of the screen shots are from Windows 8.1, but operational procedures are virtually identical for both Windows and Mac OS.
- Note that the actual appearance of the screen that appears when using this software depends on your computer system setup and on the operating system you are using.
- Screen shots shown in this User's Guide are intended for illustrative purposes only. The actual text and values that appear on display may differ from the examples shown in this User's Guide.


## System Requirements

## Windows

Operating Systems:
Windows 7, Windows 8.1, Windows 10
Your hardware configuration needs higher than functionalities that operating system recommends.
Computer: Computer with one of the Windows operating systems pre-installed (Excluding computers with an upgraded operating system and self-built computers.)

Disk Space: 300MB for installation and uninstall
Note: $\quad$ Actual requirements and product functionality may vary based on your system configuration and operating system.

Other: $\quad$ Video adapter and display must support resolution of XGA (1024×768) or higher, 16 bit or higher system color.
Internet Explorer ${ }^{\circledR} 7.0$ or later.
Adobe ${ }^{\circledR}$ Reader ${ }^{\circledR} 8.0$ or later.
Microsoft ${ }^{\circledR}$ Exce ${ }^{\circledR}$ 2000, Microsoft Excel 2003, Microsoft Excel 2007 or Microsoft Excel 2010

## Mac OS

Operating Systems:
OS X 10.10, OS X 10.11, macOS 10.12
Your hardware configuration needs higher than functionalities that operating system recommends.
Computer: Computer with one of the Macintosh operating systems pre-installed (Excluding computers with an upgraded operating system.)
Disk Space: 300MB for installation and uninstall
Note: $\quad$ Actual requirements and product functionality may vary based on your system configuration and operating system.

Other: $\quad$ Video adapter and display must support resolution of XGA ( $1024 \times 768$ ) or higher. For Retina display, use of the Low Resolution mode is recommended.
Safari 5.1 or later.
Adobe Reader 8.1 or later.

## Note

- For the latest information about system requirements, visit the website at the URL below: http://world.casio.com/support/os_support/
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## 1. Installing, Uninstalling or Updating the Software

The installation procedure is slightly different for Windows and Mac OS. Perform installation in accordance with the instructions that appear on your computer screen.

## To install the software

1. On your computer, double-click the fx-CG Manager PLUS application EXE file.
2. Perform operations as instructed by the text that appears on the screen.

## To uninstall the software

## Windows

Use Windows Control Panel to uninstall the software.

## Mac OS

1. Move fx-CG Manager PLUS Subscription(.app) to the Trash folder.
2. From the menu, select [Finder] and then [Empty Trash].

## Auto Notification of Update

If your computer is connected to the Internet, the application will connect to the CASIO server whenever you start it up. When there is an update file for this application on the CASIO server, a dialog box will appear to let you know.

http://edu.casio.com/: Clicking this link will start up your browser and go to the CASIO website. Clicking [OK] will close the dialog box.
You can disable further auto-notification of updates by selecting the check box next to "Disable Auto Notification of Update" before clicking [OK]. To re-enable auto-notification of updates, select "Auto Notification of Update" on the Help menu.

## To start up the software

1. Windows: On your computer's desktop, double-click the "fx-CG Manager PLUS Subscription for fx-CG50series*" icon.
Mac OS: In the "Applications" - "CASIO" folder, double-click "fx-CG Manager PLUS Subscription for fx-CG50series*".

* Type B: fx-CG Manager PLUS Subscription

Windows


Mac OS


- Windows: Starting up this application for the first time will display a dialog box for selecting a calculator model. Select a calculator model and then click [OK].


## 2. Screen Configuration

The following shows the fx-CG Manager PLUS screen.


[^0]
## Menu Bar

- If a menu command can also be executed by clicking a toolbar button, the applicable toolbar button is also provided.


## File Menu

| Menu | Toolbar <br> Button | Description |
| :--- | :--- | :--- |
| New |  | Creates a new Key-Log file. |
| Open... |  | Closes the currently open file. |
| Close |  | Captures the emulator screen. |
| Capture Screen | Savesting file. |  |
| Save |  | Prints the currently displayed bitmap file. |
| Save As... |  | Displays a preview of the print image. |
| Print... |  | Displays the print setup dialog box. |

[^1]■ Edit Menu

| Menu | Toolbar Button | Description |
| :---: | :---: | :---: |
| Undo | 4 | Undoes the last operation． |
| Redo | M | Redoes the last undone operation． |
| Cut | W | Moves the selected data to the clipboard． |
| Copy | 自 | Copies selected data to the clipboard． |
| Paste | 埌配 | Pastes the clipboard contents． |
| Clear |  | Deletes the currently selected area． |
| Select All |  | Selects all Key－Log records． |

＊The Edit menu is disabled during emulator operation．

## View Menu

| Menu | Submenu |  |
| :--- | :--- | :--- |
| Calc Key | Small | Selects small－size calculator keys． |
|  | Normal | Selects normal－size calculator keys． |
|  | Large 1＊ | Selects large 1－size calculator keys． |
|  | Large 2＊$^{*}$ Calc Screen | Selects large 2－size calculator keys． |
|  | Large 3＊ | Selects large 3－size calculator keys． |
| Toolbar | Small | Selects small－size display． |
|  | Normal | Selects normal－size display． |
|  | Large 1＊ | Selects large 1－size display． |
|  | Large 2＊ | Selects large 2－size display． |
|  | Large 3＊ | Selects large 3－size display． |
|  | Standard | Toggles display of the standard toolbar on and off． |
|  | Log | Toggles display of the log toolbar on and off． |
|  | Edit | Toggles display of the edit toolbar on and off． |
|  | Bitmap | Toggles display of the bitmap toolbar on and off． |

＊Type A only

■ Key-Log Menu

| Menu | Toolbar <br> Button | Description |
| :--- | :--- | :--- | Add | Delete | Adds a new Key-Log record (Key-Log editor mode <br> only). |
| :--- | :--- | :--- |
| Emulator | Deletes the currently displayed Key-Log record <br> (Key-Log editor mode only). |
| Editor | Enters the emulator mode. |
| Auto Play | Starts Key-Log auto playback. |
| Step Play | Starts Key-Log manual playback. |

## $\square$ Window Menu

| Menu | Description |
| :--- | :--- |
| Tiled*1 $^{\text {Horizontal }}$ *2 | Displays all windows in a tiled configuration. |
| Hisplays all windows in a horizontal line. |  |

${ }^{* 1}$ Mac OS: Cascade - Displays all windows in a cascade configuration.
*2 Windows only

- The Window menu also shows the names of files that you have open. When you have multiple files open, the file name at the top of the list is the one you are currently working with the active file.

■ Tools Menu (Windows only)

| Menu | Description |
| :---: | :--- |
| Options... ${ }^{* 1}$ | Displays a dialog box for configuring optional settings. |

${ }^{* 1}$ Mac OS: On the [fx-CG Manager PLUS] menu, selected [Preferences...].

## - Help Menu

| Menu | Submenu | Description |
| :--- | :--- | :--- |
| Manual | Calculator | Links to http://world.casio.com/manual/calc/. Download <br> the Calculator User's Guide there. |
|  | Manager PLUS | Displays the Manager PLUS User's Guide. |
|  | Activation | Displays the Activation User's Guide. |
| Auto Notification <br> of Update |  | Toggles Auto Notification of Update between enabled <br> and disabled. Auto Notification of Update is enabled <br> when this menu item has a check box next to it. |
|  |  | Displays the end user license agreement. |
| About...*1 |  | Displays version information. |
| Activation... |  | Displays the activation screen. For details, see the <br> Activation User's Guide. |

${ }^{* 1}$ Mac OS: On the [fx-CG Manager PLUS] menu, selected [About fx-CG Manager PLUS].

## Toolbar

- The toolbar buttons correspond to menu bar commands. See the section of this manual that explains the menu bar for details about each button's function.


## $\square$ Standard Toolbar

 Preview

## ■ Log Toolbar



(1) Add
(2) Delete
(3) Insert Pause
(4) Font ... Specifies the font of input text.
(5) Font Size ... Specifies the font size of input text.
(6) Key-Log Record ... Selects the Key-Log record to be played back or edited.

## ■ Bitmap Toolbar


(1) Capture Screen
(2) Outer Frame

Specifies an outer frame for screen captures.
(3) Bitmap Size

Specifies the bitmap size. Supported sizes are Small, Normal, $\times 2$ and $\times 3$.

## Status Bar


(1) Help text is displayed here (Windows only).
(2) Displays the process currently being performed.
(3) Toggles between the insert and overwrite modes.

## 3. Emulator Mode and Key-Log Editor Mode

This application has two modes.
You can use either of the following to operations to select the mode you want.

- On the [KeyLog] menu, select either [Emulator] or [Editor].
- On the standard toolbar, click $\stackrel{\text { 参 }}{ }$ or


## Emulator Mode

Use this mode when you want to perform mainly emulator operations.

## Key-Log Editor Mode

Use this mode when you want to perform mainly Key-Log data operations.

## 4. Emulating Calculator Operation

- The emulator makes it possible to mimic calculator operation using your computer's mouse and keyboard.
- For details about emulator operations, see the Calculator User's Guide. You can view the User's Guide by selecting [Manual] - [Calculator] on the Help menu.
- Note that some emulator functions are different from the calculator functions. For details, see " 9. Differences between Calculator and Emulator Functions" (page EN-29).


## Note

- Image files (g3b/g3p) created with this application and eActivity files that contain image data created with the this application cannot be opened with the fx-CG10 calculator.


## Using the Emulator

- Key operations are identical to those you perform on the calculator.
- Operation results appear on the LCD screen.


In the Emulator Mode, you use your computer keyboard to operate the emulator. The following explains the keyboard keys you should use to perform each emulator key operation.
(1) Computer keyboard keys that have the same key markings as the emulator keys

(2) Computer keyboard keys that have different key markings as the emulator keys

| Computer Key (Windows) | Computer Key (Mac OS) | Emulator Key |
| :---: | :---: | :---: |
| [Tab] | [tab] | ACOOM |
| [Insert] | [control]+[s] | SHHIT |
| [Home] | [fn]+[ $\leftarrow$ ] or [home] | OPTN |
| [Page Up] | [fn]+[ $\uparrow$ ] or [page up] | VARS |
| [Page Down] | [fn]+[ $\downarrow$ ] or [page down] | [\|ENO |
| [End] | [fn]+[ $\rightarrow$ ] or [end] | A1PHA |
| [Esc] | [esc] | EXIT |
| [Delete] | [delete] | 國 |
| [Back Space] | - | DEL |
| [Enter] | [return] or [enter] | ExE |
| [*] | [*] | $\pm$ |
| [/] | [/] | $\div$ |

## Changing the Size of the Emulator

The emulator's keypad and LCD screen each can be toggled between five sizes: small, normal, large 1, large 2, and large 3*.

* Type B: two sizes: small and normal


## To specify the size of the keypad

1. On the [View] menu, select [Calc Key].
2. From the submenu that appears, select the keypad size you want.

## To specify the size of the LCD screen

1. On the [View] menu, select [Calc Screen].
2. From the submenu that appears, select the LCD screen size you want.

## Note

- If the LCD screen or keypad is displayed as a floating window (page EN-15), you also can resize the window by dragging the one side of the window frame upwards, downwards, left, or right.
Resizing by dragging the window frame lets make the floating window larger than the normal size selectable on the submenu above.
- Use of the "Normal" LCD screen size setting is recommended.


## Using the Floating Emulator Feature

- You can drag the LCD screen and the keypad to any location you want on your computer screen.
- You can display the emulator LCD screen and its keypad in their own windows that are separate from the main window.


## To make the LCD screen and/or keypad a floating window

1. Double-click the LCD screen and/or keypad.
2. Drag the LCD screen and/or keypad to the left so it is outside of the main window, and drop it there.


## $\square$ Moving the LCD Screen and Keypad Back into the Main Window

- Perform the following steps to move the LCD screen and/or keypad back into the main window from independent floating windows.
- Double-click the floating LCD screen and/or keypad.
- Drag the LCD screen and/or keypad back to the left side of the main window.


## Important!

- You can return an independent floating window to the main window by dragging the floating window to the left side of the main window only. Dragging top, bottom, or right side of the main window will not work.


## Capturing the Emulator LCD Screen Image

- You can use the following procedure to capture an image of the emulator LCD screen.


## To capture the emulator LCD screen image

1. On the [File] menu, select [Capture Screen] to display a capture of the emulator LCD screen (page EN-6).

- You could also click
on the bitmap toolbar.
- You can also add a frame to the captured image or change the image zoom factor, if you want. For details, see "Bitmap Toolbar" (page EN-11) and "LCD Screen Capture Settings" (page EN-23).
- Windows: If either a window containing of a captured image or the Key-Log screen is currently maximized (using the Windows maximize command) on your computer display, any window produced by the capture operation will also be maximized. This is true regardless of the size setting specified for screen capture on the Options dialog box (page EN-23).

2. Select the captured screen image window and then click to save it to a file.

* You can save a screen capture as either of the two following file formats.
- Bitmap format
- JPEG format

This application uses libraries by the Independent JPEG Group.

## Opening a Saved LCD Screen Image

- You can open a saved LCD screen image and display it on your computer. You can have multiple screen images open at the same time.
- LCD screen images can be copied and pasted into other applications in order to create operation example handouts, assignments, etc.
* Only bitmap files can be opened using this procedure. Opening of JPEG files is not supported.


## To copy an LCD screen image and paste it into another application

1. Click and then open the file that contains the LCD screen image you want to copy.
2. Select the LCD screen image window and then click 直 to copy it to the clipboard.
3. Open the other application and then paste the contents of the clipboard.

## 5. Using the Emulator Key-Log

This section explains how to use the Key-Log, which is a log of the emulator's key operations. It also covers playback of recorded key operations and editing of Key-Log records.
All of the operations in this section are performed using toolbar buttons.

## ■ Key-Log File Structure

A Key-Log file can contain multiple Key-Log records.
Key-Log records can contain recorded key operations, text and Main Memory data.
The following shows the Key-Log file structure.


- You can assign names (up to 20 single-byte characters) to Key-Log records.


## Important!

- Key-Log data processing can take a long time when there is a lot of data. This is normal and does not indicate malfunction.
- A key operation may not be stored to a Key-Log if you click it while an emulator calculation operation is in progress.


## Note

- Storage Memory data is not stored in Key-Log records.
- Opening the Storage Memory file during Key-Log playback can produce different results from those recorded to the Key-Log.


## To record emulator key operations using Key-Log

## When [Main Memory R/W: ON] is selected on the [KeyLog] menu

1. Click to start Key-Log recording.

- The Main Menu will appear with the Run-Matrix mode icon already highlighted.
- Click to save the calculator's current Main Memory contents and insert a Memory Character ( ${ }^{\text {™ }}$ ) at the current cursor location on the emulator screen. The Memory Character tells your computer to look up the memory contents saved at that location for use in the calculation.

2. Perform operations on the emulator.

3. Click $\square$ to stop Key-Log recording.
4. Repeat steps 1 through 3 as required.
5. Click to save the Key-Log file.

## Note

- If you click $\square$ while an fx-Manager PLUS Key-Log file is open, memory contents are not saved (and a Memory Character is not inserted).

When [Main Memory R/W: OFF] is selected on the [KeyLog] menu
Operation is the same as that when [Main Memory R/W: ON] is selected on the [KeyLog] menu, except for the following points.

- The Main Menu does not appear when Key-Log recording is started.
- Main Memory contents are not saved when is clicked. (Memory Character cannot be inserted at cursor position.)


## To perform Key-Log auto play of a recorded key operation

## When [Main Memory R/W: ON] is selected on the [KeyLog] menu

1. Click $\curvearrowleft$ and then open the Key-Log file you want to play.
2. Click to start playback.


The last key to be played is
The next key to be played is framed in green ${ }^{* 1}$.
framed in magenta. ${ }^{* 3}$
${ }^{* 1}$ Type B: orange
*2 Type B: blue
${ }^{* 3}$ Type B: The last played key is blue.

- Click II to pause playback.

Click to restart playback after pausing it.
3. To stop playback, click $\square$. Stopping playback causes all keys to return to their original colors.

## Note

- Playback starts from the current cursor position.
- Each time playback comes to a Memory Character, the Main Memory contents that were stored for that location are looked up, and playback then proceeds to the next operation using the looked up contents.
- Current Main Memory contents are automatically backed up whenever you click to start a new Key-Log playback operation. This will allow you later to restore memory contents to what they were before you started playback (if you want).
- Closing a Key-Log file causes the message "Backed up memory contents will be restored." to appear. You can specify whether you want Main Memory to be restored to the contents that were automatically backed up when you started playback of the Key-Log file (see above).
- You can use the optional settings dialog box (page EN-23) to configure playback settings like the key playback interval following a pause, the color of playback keys, etc.
- Simultaneous playback of multiple Key-Log files is not supported. If you try to open a Key-Log file while another Key-Log file is already open, the currently open file will close automatically. If the currently open file has been edited, a message "At least one file has unsaved edits. Save edits?" will appear asking if you want to save it before closing.

When [Main Memory R/W: OFF] is selected on the [KeyLog] menu
Operation is the same as that when [Main Memory R/W: ON] is selected on the [KeyLog] menu, except for the following points.

- When Key-Log is played back, current Main Memory contents are not backed up.
- Memory Character is ignored. (Main Memory contents are not played back.)


## Note

- Current Main Memory contents are backed up, even if you start Key-Log playback by selecting [Main Memory R/W: ON] on the [KeyLog] menu and then change to [Main Memory R/W: OFF].


## To playback a Key-Log record manually (STEP playback)

1. Click and then open the Key-Log file you want to play.
2. Click IV to play the first key operation in the Key-Log.
3. Keep pressing IV to play Key-Log contents one step at a time.
4. To stop playback, click

## To edit a Key-Log record

1. Click and then open the Key-Log file you want to edit.
2. Select the Key-Log record you want to edit.


Select the Key-Log record from this menu.
3. Edit the key operations and text of the Key-Log record.

- You can use normal text input and editing operations to edit the keys in a Key-Log record.
- When inputting text, you can specify the font and font size you want to use.



## Note

- Copying and pasting of Memory Characters is supported. Pasting a Memory Character to a different location causes the Main Memory contents that were saved at the original Memory Character location to be referenced at the new (pasted) location.

4．Click to save the Key－Log file．

## To add a Key－Log record to the currently open Key－Log file

After opening the Key－Log file to which you want to add the record，click 圧．
This automatically assigns the Key－Log record a name（Example：＂Data1＂）and displays it in the menu．

## To rename a Key－Log record

1．Select the Key－Log record you want to rename from the menu．
2．Click the name of the Key－Log record and then change it．
3．Press the［Enter］key．

## To delete a Key－Log record

1．Select the Key－Log record you want to delete from the menu．
2．Click 需 to delete the selected Key－Log record and display the next one。

## Note

－There must be at least one Key－Log record in memory．You will not be able to delete a Key－Log record if it is the only one left in memory．

## Inputting a Pause Character

A pause character causes Key－Log playback to pause automatically when it reaches the character． To input a pause character，click（II）．

## ■ Copying Keys or Text and Pasting It into Another Application

Keys and text can be copied and pasted into other applications in order to create operation example handouts, assignments, etc.

## To copy keys or text and paste it into another application

1. Drag the cursor across the keys or text you want to copy.
2. Click 酋 to copy the selected keys or text to the clipboard.
3. Open the other application and then paste the contents of the clipboard.

## Note

- A Memory Character also can be copied into another application. A Memory Character that has been pasted into another application can be copied and pasted into the application. When a Memory Character that has been pasted into the application is played back, it reproduces the applicable memory contents. Note, however, that this is true only when the number of Memory Characters that were initially copied from a calculation in the application is the same as the number of Memory Characters that were pasted from the other application.


## 6. Configuring Options Dialog Box Setting

LCD Screen Capture Settings

(1) Select this option to add a frame to an LCD screen capture.
(2) Specifies the screen size during LCD screen capture. Supported sizes are Small, Normal, $\times 2$ and $\times 3$.

Key-Log Playback

(1) Select this option to frame the current key in magenta.*1
(2) Select this option to frame the next key in green*2.
(3) Specifies how much time should be allowed to elapse to resume paused playback. You can set an interval in the range of 10 seconds to 10 minutes in 10 -second steps.
(4) Specifies the key playback interval during auto play. You can set an interval of 0.1 second, or any interval in the range of 0.5 to 5 seconds, in 0.5 -second steps.
${ }^{* 1}$ Type B: Select this option to highlight the current key in blue.
*2 Type B: orange

(1) You can configure Copy \& Paste so either values or Excel formulas are pasted into a spreadsheet.

Paste Formulas ... Pastes formulas.
Paste Values ... Pastes values only.
(2) You also can specify the language to be used when pasting to Microsoft Excel.

Whenever you copy from Spreadsheet and paste to an Excel formula, the formula will be converted to the selected language.
Example: Celllf( $\longrightarrow$ IF( : English

$$
\begin{array}{ll}
\rightarrow & \text { SI( }
\end{array} \quad \text { : Spanish }
$$

When using the following language versions of Excel, configure the Excel Language setting as shown below.
Arabic: English2
Slovenian: English3
Portuguese (European): PortugueseEu
Portuguese (Brazilian): PortugueseBr

- For details about copying and pasting Excel formulas, see page EN-33.


## 7. Other Functions

## QR Code Function

- Clicking the QR Code on the LCD screen starts up the browser and accesses the URL registered to the QR Code.


## Printing

- You can use the following procedure to print LCD screen captures.

1. Click the window of the LCD screen capture that you want to print to select it.
2. Click . This will display the Print dialog box.

3. Click $[\mathrm{OK}]$ to start printing.

## Important!

- Each screen image is printed on a separate page.
- Images are printed in accordance with width setting of the paper size selected on the Print dialog box.
- If you are printing a bitmap image that was created using another application and does not fit within the preview area, only the part within the preview area will be visible. Also, only that part will be printed.


## ■ Print Preview (Windows only)

- Selecting [Print Preview] on the [File] menu displays the print preview image.

(1) Displays the Print dialog box.
(2) Enlarges the preview image.
(3) Reduces the size of the preview image.
(4) Closes the print preview window image.


## $\square$ Print Setup Dialog Box

- Selecting [Print Setup] on the [File] menu displays the Print Setup dialog box.



## Shortcut Menu

- Right-clicking your mouse (Windows) or performing a control+click (Mac OS) will display one of the shortcut menus shown below.
- During Key-Log Editing

- During Bitmap Display of the Calculator Screen


A screen zoom operation affects only the screen where you display the shortcut menu. If you have multiple screens on the display, the other screens are not affected by the zoom operation.

- When Using the Emulator


## Note

Select [Copy] to copy the screen to the clipboard.


- On the Emulator Keypad



## 8. File Types Supported by the Application

- The following are the file name extensions that are supported by the Memory application.

| File Extension | Description |
| :---: | :---: |
| .g1m, .g2m, .g3m, .g1r, or .g2r | Data items listed in the Main Memory information screen that has been copied to Storage Memory. |
| .g1e, .g2e, or .g3e | eActivity files |
| .g3a, .g3I | .g3a: Add-in applications <br> .g31: Add-in languages and add-in menus |
| .g3p | Picture files |
| .g3b | Flipbook files |
| .bmp | Bitmap files |
| .txt | Text files |
| .csv | CSV files |
| Other file name extensions | These files are not supported by this calculator. |

- The following are the file name extensions that are supported by the [File] menu's [Open] command.

| File Extension | Description |
| :--- | :--- |
| .$g 1 \mathrm{k}$ | fx-Manager PLUS Key-Log file |
| . g 3 k | fx -CG Manager PLUS Key-Log file |

## Note

- You can use the Memory application to import all file types (except g1k and g3k) into the emulator.
- Files with the extension g1k/g3k can be used in Key-Log files.


## 9. Differences between Calculator and Emulator Functions

## ■ Link Application

Calculator: Data transfer execution supported.
Emulator: Data send/receive, and configuring cable, wakeup, and capture settings are not supported.

## ■ System Applications (Display Settings, Power Properties Settings, Battery Settings, User Name, OS Update)

Calculator: Display Settings, Power Properties Settings, Battery Settings, User Name and OS Update supported.
Emulator: Display Settings, Power Properties Settings, Battery Settings, User Name and OS Update not supported.

## Program Application

Calculator: Stores created text files in Main Memory Program folder.
Emulator: Stores created text files in Storage Memory Program folder.

## $\square$ Importing and Exporting Files

You can perform the following operations on the emulator to import and export files.

## To import a file

1. From the Main Menu, enter the Memory mode.

| Memory Manager |
| :--- |
| F1:Main Memory |
| F2:Storage Memory |
| F3:Import/Export |
| F4:Backup |
| F5:Optimization |
| MAIN SRGEMED PC BACKUP $\square$ OPT |



Import/Export Files
F1: Import Files
F2:Export Files

Import Export
3. Click F1 (Import).

- This displays a dialog box for opening a file.


4. Select the file you want to import, and then click [Open].
5. Select the folder where you want to import the file and then click F1(SAVE).

6. Click EXXT.

## To export a file

1. From the Main Menu, enter the Memory mode.
2. Click ㅍ3 (PC).
3. Click F2 (Export).

| 國 7061504 Bytes Free |  |
| :---: | :---: |
| SMEM |  |
| CASIO |  |
| 3DGraph.g3a : 23 |  |
| - ${ }^{\text {convog3a }}$ |  |
| Geometry.g3a: |  |
| Physium.g3a |  |
| PPictPlot.g3a | 81K |
| SELECTI COPY SEARCHIFOLDE | DELEI |

4. Highlight the file you want to export. Next, click F1 (SELECT) and then F2 (Copy).

- This displays a dialog box for selecting the destination folder of the exported file.


5. Select the destination folder you want and then click [OK].

6. Click EXTT.

## Installing an Add-In

You can perform the following procedure on the emulator to install an Add-In application or Add-In language.

## To install an Add-In application

1. From the Main Menu, enter the Memory mode.

2. Click $\mathrm{FB}_{(\mathrm{PC})} \mathrm{FI}^{(I m p o r t)}$.

- This displays a dialog box for opening a file.


3. Select the Add-In file you want and then click [Open].

| 酋共 7061504 Bytes Free |
| :--- |
| Rave |
| ROOT |
| $\square$ CAS IO |
|  |
|  |
| SAVE |

4．Select the folder where you want to save the Add－In file and then click F1（SAVE）．


5．Click EXTIT
6．Click 【⿺𠃊⿻丷木犬⿱丆贝：
－The icon of the application you just installed should be visible on the Main Menu．

－Some Add－In applications may act differently on the calculator than they do on the emulator．

## OFF（SHIFT + ACON $)$

Calculator：Turns off power．
Emulator：Does not turn off the emulator．（（SHIFT＋ACOON does not perform any operation．）

## $\square$ COPY \＆PASTE

Calculator：COPY \＆PASTE supported on the calculator．
Emulator：COPY \＆PASTE supported on the calculator，and between the calculator and other applications running on the computer．

Copy and paste of calculator－specific input codes between this application and other applications is not supported in some cases．

Supports copy and paste between an emulator spreadsheet and an Excel spreadsheet running on your computer（Windows only）．
－Copy and paste of the following formulas is supported between an emulator spreadsheet and an Excel spreadsheet running on your computer．
$+,-, *, /, \wedge,=,<>,>,<,>=,<=, \$,:$
IF，MIN，MAX，AVERAGE，MEDIAN，SUM，PRODUCT
LOG，FACT，POWER，SQRT，LOG10，LN，PI
SIN，COS，TAN，ASIN，ACOS，ATAN，SINH，COSH，TANH，ASINH，ACOSH，ATANH
ABS，GCD，LCM，MOD，TRUNC，INT，ROUND，PERMUT，COMBIN，RAND，NOT，AND，OR

The table below shows how some formulas may be modified automatically when a paste operation is performed.

Modified Formulas

| Spreadsheet | Paste Operation* | Excel |
| :---: | :---: | :---: |
| $\times$ | $\Leftrightarrow$ | * |
| $\div$ | $\Leftrightarrow$ | / |
| \# | $\Leftrightarrow$ | <> |
| $\geqq$ | $\Leftrightarrow$ | >= |
| $\leqq$ | $\Leftrightarrow$ | <= |
| Omitted multiplication sign | $\rightarrow$ | * |
| Cellif( | $\Leftrightarrow$ | IF( |
| Cellmin( | $\Leftrightarrow$ | MIN( |
| Cellmax( | $\Leftrightarrow$ | MAX ( |
| CellMean( | $\Leftrightarrow$ | AVERAGE( |
| CellMedian( | $\Leftrightarrow$ | MEDIAN( |
| CellSum( | $\Leftrightarrow$ | SUM( |
| CellProd( | $\Leftrightarrow$ | PRODUCT( |
| logab(\#1,\#2 | $\Leftrightarrow$ | LOG(\#2,\#1 |
| \#1 ${ }^{2}$ | $\rightarrow$ | \#1^2 |
| \#1-1 | $\rightarrow$ | \#1^1 |
| \#1! | $\Leftrightarrow$ | FACT(\#1) |
| \#1 ${ }^{1}$ \#2 | $\rightarrow$ | \#2^(1/\#1) |
| \#1」\#2 | $\rightarrow$ | \#1/\#2 |
| $\sqrt{ } \# 1$ | $\Leftrightarrow$ | SQRT(\#1) |
| $\sqrt[3]{ } \# 1$ | $\rightarrow$ | \#1^(1/3) |
| $\log \# 1$ | $\Leftrightarrow$ | LOG10(\#1) |
| In \#1 | $\Leftrightarrow$ | LN(\#1) |
| $\mathrm{e}^{\wedge} \# 1$ | $\Leftrightarrow$ | EXP(\#1) |
| 10\#1 | $\rightarrow$ | 10^\#1 |
| $\pi$ | $\Leftrightarrow$ | Pl() |
| E\#n1 | $\rightarrow$ | 10^\#n1 |
| \#n1E\#n2 | $\rightarrow$ | \#n1 * 10^\#n2 |
| \#1^\#2 | $\leftarrow$ | POWER(\#1, \#2) |
| sin \#1 | $\Leftrightarrow$ | SIN(\#1) |
| cos \#1 | $\Leftrightarrow$ | COS(\#1) |
| tan \#1 | $\Leftrightarrow$ | TAN(\#1) |
| $\sin ^{-1} \# 1$ | $\Leftrightarrow$ | ASIN(\#1) |
| $\cos ^{-1} \# 1$ | $\Leftrightarrow$ | ACOS(\#1) |
| $\tan ^{-1} \# 1$ | $\Leftrightarrow$ | ATAN(\#1) |
| sinh \#1 | $\Leftrightarrow$ | SINH(\#1) |
| cosh \#1 | $\Leftrightarrow$ | COSH(\#1) |
| tanh \#1 | $\Leftrightarrow$ | TANH(\#1) |


| Spreadsheet | Paste Operation* | Excel |
| :--- | :---: | :--- |
| sinh $^{-1} \# 1$ | $\Leftrightarrow$ | ASINH(\#1) |
| cosh $^{-1} \# 1$ | $\Leftrightarrow$ | ACOSH(\#1) |
| tanh $^{-1} \# 1$ | $\Leftrightarrow$ | ATANH(\#1) |
| Abs \#1 | $\Leftrightarrow$ | ABS(\#1) |
| GCD | $\Leftrightarrow$ | GCD( |
| LCM( | $\Leftrightarrow$ | LCM( |
| MOD( | $\Leftrightarrow$ | MOD( |
| Int \#1 | $\Leftrightarrow$ | TRUNC(\#1) |
| Intg \#1 | $\Leftrightarrow$ | INT(\#1) |
| RndFix( | $\Leftrightarrow$ | ROUND( |
| \#1P\#2 | $\Leftrightarrow$ | PERMUT(\#1,\#2) |
| \#1C\#2 | $\Leftrightarrow$ | COMBIN(\#1,\#2) |
| P( | $\Leftrightarrow$ | NORMSDIST( |
| Ran\# | $\Leftrightarrow$ | RAND() |
| Not \#1 | $\Leftrightarrow$ | NOT(\#1) |
| \#1 And \#2 | $\Leftrightarrow$ | AND(\#1,\#2) |
| \#1 Or \#2 | $\Leftrightarrow$ OR(\#1,\#2) |  |

* The following are the meanings of the symbols in the "Paste Operation" column of the above table.
$\Leftrightarrow$ : Either way
$\rightarrow$ : From emulator spreadsheet to Excel
$\leftarrow$ : From Excel to emulator spreadsheet
- For information about how formulas are modified when using a non-English version of Excel, see the Formula List (page EN-36).
- If a paste operation includes an unsupported formula or an operation whose value causes an error, only the final value will pasted without the formula.
- If a formula being pasted into an emulator spreadsheet exceeds 255 bytes after being modified as described in the table above, only the final value will be pasted without the formula.
- An error will occur if the argument of a formula is outside the argument range of the location where it is being pasted.
- When pasting a formula with a relative cell reference (such as: $=A 1+1$ ) from Spreadsheet to Excel, make sure you paste it into the cell with the same name as the cell you copied it from. Copying it into a different cell will cause an incorrect cell reference.
Formula List

| Calculator | English | French | German | Spanish | Portuguese (European) | Czech | Danish | Dutch | Finnish | Calculator |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cellif | IF | SI | WENN | SI | SE | KDYŽ | HVIS | ALS | JOS | Cellif |
| Cellmin | MIN | MIN | MIN | MIN | míNIMO | MIN | MIN | MIN | MIN | CellMin |
| Cellmax | MAX | MAX | MAX | MAX | MÁXIMO | MAX | MAKS | MAX | MAKS | Cellmax |
| Cellimean | AVERAGE | MOYENNE | MITTELWERT | PROMEDIO | MÉDIA | PRU゚MĚR | MIDDEL | GEMIDDELDE | KESKIARVO | Cellmean |
| CellMedian | MEDIAN | MEDIANE | MEDIAN | MEDIANA | MED | MEDIAN | MEDIAN | MEDIAAN | MEDIAANI | CellMedian |
| CellSum | SUM | SOMME | SUMME | SUMA | SOMA | SUMA | SUM | SOM | SUMMA | CellSum |
| CellProd | PRODUCT | PRODUIT | PRODUKT | PRODUCTO | PRODUTO | SOUČIN | PRODUKT | PRODUCT | TULO | CellProd |
| RndFix | ROUND | ARRONDI | RUNDEN | REDONDEAR | ARRED | ZAOKROUHLIT | AFRUND | AFRONDEN | PYÖRISTÄ | RndFix |
| GCD | GCD | PGCD | GGT | M.C.D | MDC | GCD | STØRSTE.FÆLLES.DIVISOR | GGD | SUURIN.YHT.TEKIJÄ | GCD |
| LCM | LCM | PPCM | KGV | M.C.M | MMC | LCM | MINDSTE.FÆELLES.MULTIPLUM | KGV | PIENIN.YHT.JAETTAVA | LCM |
| MOD | MOD | MOD | REST | RESIDUO | RESTO | MOD | REST | REST | JAKOJ | MOD |
| P | NORMSDIST | LOI.NORMALE.STANDARD | STANDNORMVERT | DISTR.NORM.ESTAND | DIST.NORMP | NORMSDIST | STANDARDNORMFORDELING | STAND.NORM.VERD | NORM.JAKAUMA.NORMIT | P |
| $\pi$ | PI | PI | PI | PI | PI | PI | PI | PI | PII | $\pi$ |
| Ran\# | RAND | ALEA | ZUFALLSZAHL | ALEATORIO | ALEATÓRIO | NÁHČISLO | SLUMP | ASELECT | SATUNNAISLUKU | Ran\# |
| $\wedge$ | POWER | PUISSANCE | POTENZ | POTENCIA | POTÊNCIA | POWER | POTENS | MACHT | POTENSSI | $\wedge$ |
| $\log$ | LOG | LOG | LOG | LOG | LOG | LOGZ | LOG | LOG | LOG | 1 log |
| ! | FACT | FACT | FAKULTÄT | FACT | FACTORIAL | FAKTORIÁL | FAKULTET | FACULTEIT | KERTOMA | ! |
| $\checkmark$ | SQRT | RACINE | WURZEL | RAIZ | RAIZQ | ODMOCNINA | KVROD | WORTEL | NELIÖJUURI | $\checkmark$ |
| $\log 10$ | LOG10 | LOG10 | LOG10 | LOG10 | LOG10 | LOG | LOG10 | LOG10 | LOG10 | $\log 10$ |
| In | LN | LN | LN | LN | LN | LN | LN | LN | LUONNLOG | In |
| 10^ | EXP | EXP | EXP | EXP | EXP | EXP | EKSP | EXP | EKSPONENTTI | 10^ |
| sin | SIN | SIN | SIN | SENO | SEN | SIN | SIN | SIN | SIN | sin |
| cos | COS | COS | cos | COS | COS | COS | cos | cos | cos | cos |
| tan | TAN | TAN | TAN | TAN | TAN | TG | TAN | TAN | TAN | tan |
| sin-1 | ASIN | ASIN | ARCSIN | ASENO | ASEN | ARCSIN | ARCSIN | BOOGSIN | ASIN | sin-1 |
| cos-1 | ACOS | ACOS | ARCCOS | ACOS | ACOS | ARCCOS | ARCCOS | BOOGCOS | ACOS | cos-1 |
| tan-1 | ATAN | ATAN | ARCTAN | ATAN | ATAN | ARCTG | ARCTAN | BOOGTAN | ATAN | tan-1 |
| sinh | SINH | SINH | SINHYP | SENOH | SENH | SINH | SINH | SINH | SINH | sinh |
| cosh | COSH | COSH | COSHYP | COSH | COSH | COSH | COSH | COSH | COSH | cosh |
| tanh | TANH | TANH | TANHYP | TANH | TANH | TGH | TANH | TANH | TANH | tanh |
| sinh-1 | ASINH | ASINH | ARCSINHYP | ASENOH | ASENH | ARCSINH | ARCSINH | BOOGSINH | ASINH | sinh-1 |
| cosh-1 | ACOSH | ACOSH | ARCCOSHYP | ACOSH | ACOSH | ARCCOSH | ARCCOSH | BOOGCOSH | ACOSH | cosh-1 |
| tanh-1 | ATANH | ATANH | ARCTANHYP | ATANH | ATANH | ARCTGH | ARCTANH | BOOGTANH | ATANH | tanh-1 |
| Not | NOT | NON | NICHT | NO | NÃO | NE | IKKE | NIET | EI | Not |
| Abs | ABS | ABS | ABS | ABS | ABS | ABS | ABS | ABS | ITSEISARVO | Abs |
| Int | TRUNC | TRONQUE | KÜRZEN | TRUNCAR | TRUNCAR | USEKNOUT | AFKORT | GEHEEL | KATKAISE | Int |
| Intg | INT | ENT | GANZZAHL | ENTERO | INT | CELȦ.ČÁST | HELTAL | INTEGER | KOKONAISLUKU | Intg |
| nPr | PERMUT | PERMUTATION | VARIATIONEN | PERMUTACIONES | PERMUTAR | PERMUTACE | PERMUT | PERMUTATIES | PERMUTAATIO | nPr |
| nCr | COMBIN | COMBIN | KOMBINATIONEN | COMBINAT | COMBIN | KOMBINACE | KOMBIN | COMBINATIES | KOMBINAATIO | nCr |
| And | AND | ET | UND | Y | E | A | OG | EN | JA | And |
| Or | OR | OU | ODER | 0 | OU | NEBO | ELLER | OF | TAI | Or |


| Calculator | Hungarian | Italian | Norwegian | Polish | *2) Portuguese (Brazilian) | Swedish | Russian | Turkish | *3) Arabic | *3) Slovenian | Calculator |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cellif | HA | SE | HVIS | JEŻELI | SE | OM | ЕСли | EǦER | IF | IF | Cellif |
| CellMin | MIN | MIN | MIN | MIN | MiNIMO | MIN | мин | MiN | MIN | MIN | CellMin |
| Cellmax | MAX | MAX | STøRST | MAX | MÁXIMO | MAX | MAKC | MAK | MAX | MAX | Cellmax |
| CellMean | Átlag | MEDIA | GJENNOMSNITT | ŚREDNIA | MÉDIA | MEDEL | СРЗНАЧ | ORTALAMA | AVERAGE | AVERAGE | Cellimean |
| CellMedian | MEDIÁN | MEDIANA | MEDIAN | MEDIANA | MED | MEDIAN | МЕДИАНА | ORTANCA | MEDIAN | MEDIAN | CellMedian |
| Cellsum | SzUM | SOMMA | SUMMER | SUMA | SOMA | SUMMA | Сумм | TOPLA | SUM | SUM | Cellsum |
| CellProd | SZORZAT | PRODOTTO | PRODUKT | ILOCZYN | MULT | PRODUKT | ПРОИЗВЕД | ÇARPIM | PRODUCT | PRODUCT | CellProd |
| RndFix | *1) KEREKITĖS | ARROTONDA | AVRUND | ZAOKR | ARRED | AVRUNDA | ОкРУгл | YUVARLA | ROUND | ROUND | RndFix |
| GCD | GCD | MCD | SFF | GCD | MDC | SGD | Нод | OBEB | GCD | GCD | GCD |
| LCM | LCM | MCM | MFM | LCM | MMC | MGM | HOK | OKEK | LCM | LCM | LCM |
| MOD | MARADÉK | RESTO | REST | MOD | MOD | REST | OCTAT | MOD | MOD | MOD | MOD |
| P | STNORMELOSZL | DISTRIB.NORM.ST | NORMSFORDELING | ROZKEAD.NORMALNY.S | DIST.NORMP | NORMSFÖRD | HOPMCTPACП | NORMSDAĞ | NORMSDIST | NORMSDIST | P |
| $\pi$ | PI | PI.GRECO | PI | PI | PI | PI | пи | Pi | PI | PI | $\pi$ |
| Ran\# | VÉL | CASUALE | TILFELDIG | LOS | ALEATÓRIO | SLUMP | слчиС | S_SAYI_ÜRET | RAND | RAND | Ran\# |
| $\wedge$ | HATVȦNY | POTENZA | OPPHØYD.I | POTEGGA | POTÊNCIA | UPPHÖJT.TILL | СТЕПЕНь | KUVVET | POWER | POWER | $\wedge$ |
| $\log$ | LOG | LOG | LOG | LOG | LOG | LOG | LOG | LOG | LOG | LOG | $\log$ |
| $!$ | FAKT | FATTORIALE | FAKULTET | SILNIA | FATORIAL | FAKULTET | ФАКТР | ÇARPINIM | FACT | FACT | ! |
| $\checkmark$ | GYÖK | RADQ | ROT | PIERWIASTEK | RAIZ | ROT | KOPEH | KAREKÖK | SQRT | SQRT | $\sqrt{ }$ |
| $\log 10$ | LOG10 | LOG10 | LOG10 | LOG10 | LOG10 | LOG10 | LOG10 | LOG10 | LOG10 | LOG10 | ${ }^{\log 10}$ |
| In | LN | LN | LN | LN | LN | LN | LN | LN | LN | LN | In |
| $10^{\wedge}$ | KITEVÓ | EXP | EKSP | EXP | EXP | EXP | EXP | ÜS | EXP | EXP | $10^{\wedge}$ |
| sin | SIN | SEN | SIN | SIN | SEN | SIN | SIN | SiN | SIN | SIN | sin |
| cos | cos | cos | cos | cos | cos | cos | cos | cos | cos | cos | cos |
| tan | TAN | TAN | TAN | TAN | TAN | TAN | TAN | TAN | TAN | TAN | tan |
| sin-1 | ARCSIN | ARCSEN | ARCSIN | ASIN | ASEN | ARCSIN | ASIN | ASIN | ASIN | ASIN | sin-1 |
| cos-1 | ARCCOS | ARCCOS | ARCCOS | ACOS | ACOS | ARCCOS | ACOS | ACOS | ACOS | ACOS | cos-1 |
| tan-1 | ARCTAN | ARCTAN | ARCTAN | ATAN | ATAN | ARCTAN | ATAN | ATAN | ATAN | ATAN | tan-1 |
| sinh | SINH | SENH | SINH | SINH | SENH | SINH | SINH | SiNH | SINH | SINH | sinh |
| cosh | COSH | COSH | COSH | COSH | COSH | COSH | COSH | COSH | COSH | COSH | cosh |
| tanh | TANH | TANH | TANH | TANH | TANH | TANH | TANH | TANH | TANH | TANH | tanh |
| sinh-1 | ASINH | ARCSENH | ARCSINH | ASINH | ASENH | ARCSINH | ASINH | ASINH | ASINH | ASINH | sinh-1 |
| cosh-1 | ACOSH | ARCCOSH | ARCCOSH | ACOSH | ACOSH | ARCCOSH | ACOSH | ACOSH | ACOSH | ACOSH | cosh-1 |
| tanh-1 | ATANH | ARCTANH | ARCTANH | ATANH | ATANH | ARCTANH | ATANH | ATANH | ATANH | ATANH | tanh-1 |
| Not | NEM | NON | IKKE | NIE | NÃO | ICKE | HE | DEĞiL | NOT | NOT | Not |
| Abs | ABS | ASS | ABS | MODUK.LICZBY | ABS | ABS | ABS | MUTLAK | ABS | ABS | Abs |
| Int | CSONK | TRONCA | AVKORT | LICZBA.CAEK | TRUNCAR | AVKORTA | OTEP | NSAT | TRUNC | TRUNC | Int |
| Intg | INT | INT | HELTALL | ZAOKR.DO.CALK | INT | HELTAL | ЦЕЛОЕ | TAMSAYI | INT | INT | Intg |
| $n \mathrm{nPr}$ | VARIÁCIók | PERMUTAZIONE | PERMUTER | PERMUTACJE | PERMUT | PERMUT | ПЕРЕСТ | PERMÜTASYON | PERMUT | PERMUT | nPr |
| nCr | KOMBINÁCIÓK | COMBINAZIONE | KOMBINASJON | KOMBINACJE | COMBIN | KOMBIN | ЧислкомБ | KOMBINASYON | COMBIN | COMBIN | ${ }^{\text {nCr }}$ |
| And | ÉS | E | OG | ORAZ | E | OCH | и | VE | AND | AND | And |
| Or | VAGY | $\bigcirc$ | ELLER | LUB | OU | ELLER | или | YADA | OR | OR | Or |

*1) Magyar Excel 2000 felhasználóknál az RndFix függvény az Emulátorban történő másolásakor és az Excelbe való beillesztéskor a =KEREKíTÉS jelenik meg. (Módosítsa a „KEREKíTÉS" nevet „KEREK" névre a helyes működéshez.) *2) Atualiza o conversor em português incorporado.
*3) Pretvori samo decimalni simbol in ločilo.

## Note

Some mathematical functions do not copy and paste correctly between Microsoft Excel 2010 and the Emulator Spreadsheet. Change the functions below in Excel to the proper function names.

|  | Pasted Function Name | Correct Function Name <br> (Rename as shown below.) |
| :--- | :--- | :--- |
| Czech | NE | NENÍ |
| Danish | MIDDEL | GENNEMSNIT |
|  | STØRSTE.FÆLLES.DIVISOR | FFLLES.DIVISOR |
|  | HELTAL | HEL |
|  | GCD | LKO |
|  | LCM | LKT |
| Dutch | AFRONDEN | AFRONDING |
|  | WORTEL | VWORTEL |
|  | STØRST | MAKS |
| Polish | LCM | NAJW.WSP.DZIEL |
|  | MOD | NAJMN.WSP.WIEL |
| Portuguese <br> (Brazilian) | MÍNIMO | MÍN |
|  | MULT | PRODUTO |
|  | DIST.NORMP | DISTNORMP |
|  | FATORIAL | FATO |
|  | TRUNCAR | TRUNC |
| Turkish | TOPLA | TOPLAM |

## - Examination Mode

Calculator: Examination Mode supported.
Emulator: Examination Mode not supported.

## 10. Error Message Table

| Message | Description | Required Action |
| :---: | :---: | :---: |
| An error occurred while reading the file <file name>. The file may be corrupted. | Wrong file format. | Check the file to see if it is corrupted. |
| There is no more playable data. | There are no playable keys to the right of the input cursor. | Move the input cursor to the left of the keys you want to play back, and perform the play operation. |
| You cannot delete all Key- Log records at once. <br> Before deleting the selected record, first add new record. | You are trying to delete all Key-Log records, which is not allowed. | To delete all of the current records, first add a different record. At least one Key-Log record must be remaining in memory. |
| <file name> This file is read-only. Use a different file name. | You are trying to save a readonly Key-Log file after editing or recording to it. | Save the Key-Log file under a different file name. |
| A problem occurred while adding a Key-Log record. After confirming there is enough memory capacity to store the record, try again. | Some problem occurred while adding a Key-Log record. | Make sure there is enough free memory remaining to complete the operation and try again. |
| A problem occurred while writing to the file <file name> because not enough disk space is available. Check the remaining capacity of your disk and try again. | There is not enough disk space available to save the file. | Make sure there is enough free memory available and try again. |
| This application cannot be started up because the DLL version is wrong. <br> This may be due to a problem during installation. <br> Re-install the application. | Your computer has the wrong DLL version. | Installation may have failed, so re-install the application. |
| A problem occurred while reading file <file name>. The disk being read from may be damaged or may not exist. Check the disk and try again. | A problem occurred while reading from a disk. | Check the disk for data corruption and confirm that the disk exists. Then try again. |
| A problem occurred while writing file <file name>. The disk being written to may be damaged or may not exist. Check the disk and try again. | A problem occurred while writing to a disk. | Check the disk for data corruption and confirm that the disk exists. Then try again. |
| A problem occurred while reading file <file name>. The file may have been moved or deleted. | A problem occurred when you tried opening a file from the list of previously opened files on the File menu. | Check to see if the file has been moved or deleted. |


| Message | Description | Required Action |
| :---: | :---: | :---: |
| There is not enough memory. Increase memory capacity and try again. | There is not enough memory to perform the operation. | Increase memory capacity and try again. |
| A problem occurred while launching the emulator. Try re-starting the application. If you still cannot launch, it could mean that the emulator is damaged. Update the emulator or reinstall it. | A problem occurred during emulator startup. | Try restarting the application. If this does not work, it could mean that the emulator is damaged. Update the emulator or reinstall it. |
| A problem occurred while launching the manual (***.pdf) viewer. <br> Download the viewer from the site below and reinstall it. http://get.adobe.com/reader/ otherversions/ | A problem occurred during manual viewer startup. | Download and install a new viewer from http://get.adobe.com/reader/ otherversions/. |
| The following characters cannot be used in a Key-Log record name. :V?*[] | The Key-Log record name you are trying to use contains an illegal character. | The following characters are not allowed in Key-Log record names. :V?*[] |
| A system error has occurred. <br> (1) Shut down all other applications that you are not currently using. <br> (2) Check how much free space is available on your computer's hard disk. <br> (3) Exit the emulator and restart it. <br> If this does not correct the problem, it could be the emulator files have been corrupted. Please reinstall the emulator. |  | Follow the steps that are shown on the display and try again. |
| The path and/or filename exceeds the maximum length allowed by your Windows* operating system. | The number of letters in the path or file name you specified exceeds the allowable limit. | Shorten the specified path or file name. |
| A problem occurred while importing <file name>. Note that import of a file created on another model is not supported. | Some problem occurred while importing the file. | Make sure that the file was created using a calculator with the same model name as this calculator. |
| A Key-Log file cannot be created or opened while KeyLog data is being played back or recorded. <br> Stop playback or recording and try again. | You are trying to create a new Key-Log file or open an existing Key-Log file while KeyLog data is being played back or recorded on the calculator. | Stop playback or recording and try again. |


| Message | Description | Required Action |
| :--- | :--- | :--- |
| File Extension Error | The file you selected has an <br> invalid file name extension. | Make sure that the extension <br> of the file you are selecting is <br> bmp or jpg. |
| <path> Invalid Extension | The file path you selected has <br> an invalid file name extension. | Make sure that the extension of <br> the file path you are selecting <br> is bmp or jpg. |
| A problem occurred while <br> accessing the registry. <br> Check to make sure that the <br> emulator is installed correctly. | Some problem occurred during <br> registry access. | Re-installation of the emulator <br> is recommended. |
| A system error has occurred. <br> Exit the emulator and restart it. <br> If this does not correct the <br> problem, it could mean that <br> the emulator file is damaged. <br> Reinstall the emulator. | A system error occurred. | Re-installation of the emulator <br> is recommended. |
| Invalid File Name | You specified an invalid file <br> name. | Make sure that you are <br> specifying the file name <br> correctly. |
| Invalid Folder Name | You specified an invalid folder <br> name. | Make sure that you are <br> specifying the folder name <br> correctly. |
| Too Many Files Selected | The number of files you <br> selected exceeds the allowable <br> limit. | Reduce the number of selected <br> files. |
| This data was created with <br> <model name> <version>. <br> Because of this, some key <br> names may be wrong. Though <br> the Key-Log will play back, <br> some operations may not be <br> performed correctly. | You are attempting to open <br> a Key-Log file (g1k) created <br> using software that is different <br> from the software you are <br> currently running. | Open the Key-Log file with the <br> same software used to create <br> it. |
| This data was created using an <br> old version of <model name>. <br> Because of this, some key <br> names may be wrong. <br> Though the Key-Log will play <br> back, some operations may not <br> be performed correctly. | You are attempting to open <br> a Key-Log file (g1k) whose <br> version is older than that of <br> the software you are currently <br> running. Note that operations <br> may not match the operations <br> in the Key-Log file. | - |

* Mac OS: Macintosh

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## CASIO

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[^0]:    * When you have both the emulator window and Key-Log (or bitmap file) window open on the display, the emulator window always will be displayed on top.

[^1]:    *1 Windows only
    *2 Mac OS: Open Recent
    *3 Type B: Windows only
    ${ }^{* 4}$ Mac OS: On the [fx-CG Manager PLUS] menu, selected [Quit fx-CG Manager PLUS].

