

Appendix

Appendix A Resetting the Calculator

Appendix B Power Supply

Appendix C Error Message Table

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Appendix A Resetting the Calculator



Warning!

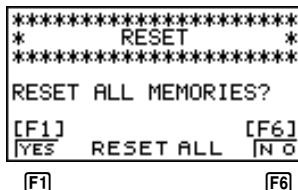
The procedure described here clears all memory contents. Never perform this operation unless you want to totally clear the memory of the calculator. If you need the data currently stored in memory, be sure to write it down somewhere before performing the RESET operation.

•To reset the calculator

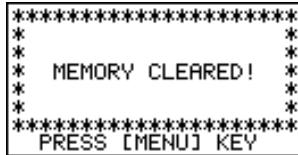
1. Highlight the **MEM** icon on the main menu and then press **[EXE]**, or press **[tan]^F**.



2. Use **▼** to move the highlighting down to “Reset” and then press **[EXE]**.



3. Press **F1** (YES) to reset the calculator or **F6** (NO) to abort the operation without resetting anything.



4. Press **[MENU]**.

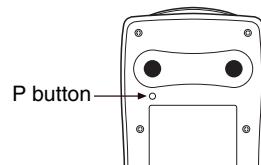


P.11

- If the display appears to dark or dim after you reset the calculator, adjust the contrast.



- If the calculator stops operating correctly for some reason, use a thin, pointed object to press the P button on the back of the calculator. This should make the RESET screen appear on the display. Perform the procedure to complete the RESET operation.



- Pressing the P button while an internal calculation is being performed will cause all data in memory to be deleted.

Appendix B Power Supply

This calculator is powered by four AAA-size (LR03 (AM4) or R03 (UM-4)) batteries. In addition, it uses a single CR2032 lithium battery as a back up power supply for the memory.

If the following message appears on the display, immediately turn off the calculator and replace batteries.

```
*****  
*  
*  
* Low battery!  
*  
*  
*****
```

If you try to continue using the calculator, it will automatically turn off in order to protect memory contents. You will not be able to turn power back on until you replace batteries.

Be sure to replace the main batteries at least once every two years, no matter how much you use the calculator during that time.

The batteries that come with this calculator discharge slightly during shipment and storage. Because of this, they may require replacement sooner than the normal expected battery life.



Warning!

All memory contents will be deleted if you remove both the main power supply and the memory back up batteries at the same time. If you ever remove both batteries, correctly reload them and then perform the reset operation.

■ Replacing Batteries

Precautions:

Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the calculator. Note the following precautions:

- Be sure that the positive (+) and negative (-) poles of each battery are facing in the proper directions.
- Never mix batteries of different types.
- Never mix old batteries and new ones.
- Never leave dead batteries in the battery compartment.
- Remove the batteries if you do not plan to use the calculator for long periods.
- Never try to recharge the batteries supplied with the calculator.
- Do not expose batteries to direct heat, let them become shorted, or try to take them apart.



(Should a battery leak, clean out the battery compartment of the calculator immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.)

Keep batteries out of the reach of small children. If swallowed, consult with a physician immediately.

•To replace the main power supply batteries



- * Never remove the main power supply and the memory back up batteries from the calculator at the same time.
- * Never turn on the calculator while the main power supply batteries are removed or not loaded correctly. Doing so can cause memory data to be deleted and malfunction of the calculator. If mishandling of batteries causes such problems, correctly load batteries and then perform the RESET operation to resume normal operation.
- * Be sure to replace all four batteries with new ones.

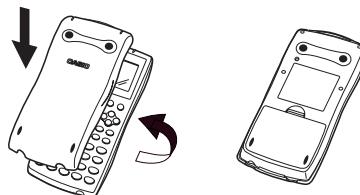
1. Press **SHIFT OFF** to turn off the calculator.



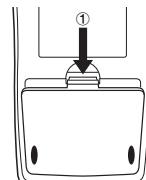
Warning!

- * Be sure to turn the calculator off before replacing batteries. Replacing batteries with power on will cause data in memory to be deleted.

2. Making sure that you do not accidentally press the **AC/ON** key, attach the case to the calculator and then turn it over.

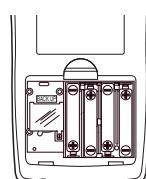


3. Remove the back cover from the calculator by pulling with your finger at the point marked ①.



4. Remove the four old batteries.

5. Load a new set of four batteries, making sure that their positive (+) and negative (-) ends are facing in the proper directions.



6. Replace the back cover.

7. Turn the calculator front side up and remove its case. Next, press **AC/ON** to turn on power.

- Power supplied by memory back up battery while the main power supply batteries are removed for replacement retains memory contents.
- Do not leave the calculator without main power supply batteries loaded for long periods. Doing so can cause deletion of data stored in memory.
- If the figures on the display appear too light and hard to see after you turn on power, adjust the contrast.

• To replace the memory back up battery



- * Before replacing the memory back up battery, turn on the calculator and check to see if the "Low battery!" message appears on the display. If it does, replace the main power supply batteries before replacing the back up power supply battery.
- * Never remove the main power supply and the memory back up batteries from the calculator at the same time.
- * Be sure to replace the back up power supply battery at least once 2 years, regardless of how much you use the calculator during that time. Failure to do so can cause data in memory to be deleted.

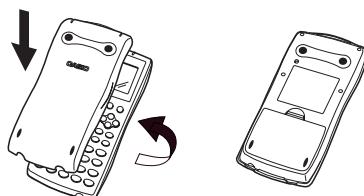
1. Press **SHIFT OFF** to turn off the calculator.



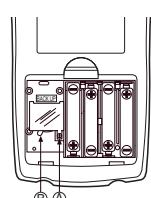
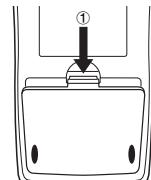
Warning!

- * Be sure to turn the calculator off before replacing batteries. Replacing batteries with power on will cause data in memory to be deleted.

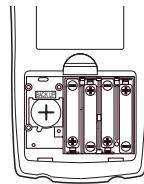
2. Making sure that you do not accidentally press the **ACON** key, attach the case to the calculator and then turn it over.



3. Remove the back cover from the calculator by pulling with your finger at the point marked ①.
4. Remove screw Ⓐ on the back of the calculator, and remove the back up battery compartment cover.
5. Insert a thin, pointed non-metal object (such as a toothpick) into the hole maked Ⓑ and remove the old battery.



6. Wipe off the surfaces of a new battery with a soft, dry cloth. Load it into the calculator so that its positive (+) side is facing up.
7. Install the memory protection battery cover onto the calculator and secure it in place with the screw.
Next, replace the back cover.
8. Turn the calculator front side up and remove its case. Next, press **AC/ON** to turn on power.



■ About the Auto Power Off Function

Calculator power turns off automatically if you do not perform any key operation for about 6 minutes. To restore power, press **AC/ON**.

Appendix C Error Message Table

Message	Meaning	Countermeasure
Syn ERROR	<p>① Calculation formula contains an error.</p> <p>② Formula in a program contains an error.</p>	<p>① Use or to display the point where the error was generated and correct it.</p> <p>② Use or to display the point where the error was generated and then correct the program.</p>
Ma ERROR	<p>① Calculation result exceeds calculation range.</p> <p>② Calculation is outside the input range of a function.</p> <p>③ Illogical operation (division by zero, etc.)</p> <p>④ Poor precision in Σ calculation results.</p> <p>⑤ Poor precision in differential calculation results.</p> <p>⑥ Poor precision in integration calculation results.</p> <p>⑦ Cannot find results of equation calculations.</p>	<p>①②③④ Check the input numeric value and correct it. When using memories, check that the numeric values stored in memories are correct.</p> <p>⑤ Try using a smaller value for Δx (x increment/decrement).</p> <p>⑥ Try changing the tolerance “tol” when using Gauss-Kronrod Rule or the number of divisions “n” when using Simpson’s Rule to another value.</p> <p>⑦ Check the coefficients of the equation.</p>
Go ERROR	<p>① No corresponding Lbl n for Goto n.</p> <p>② No program stored in program area Prog “file name”.</p>	<p>① Correctly input a Lbl n to correspond to the Goto n, or delete the Goto n if not required.</p> <p>② Store a program in program area Prog “file name”, or delete the Prog “file name” if not required.</p>
Ne ERROR	<ul style="list-style-type: none"> Nesting of subroutines by Prog “file name” exceeds 10 levels. 	<ul style="list-style-type: none"> Ensure that Prog “file name” is not used to return from subroutines to main routine. If used, delete any unnecessary Prog “file name”. Trace the subroutine jump destinations and ensure that no jumps are made back to the original program area. Ensure that returns are made correctly.

Message	Meaning	Countermeasure
Stk ERROR	<ul style="list-style-type: none"> Execution of calculations that exceed the capacity of the stack for numeric values or stack for commands. 	<ul style="list-style-type: none"> Simplify the formulas to keep stacks within 10 levels for the numeric values and 26 levels for the commands. Divide the formula into two or more parts.
Mem ERROR	<ul style="list-style-type: none"> Not enough memory to input a function into function memory. Not enough memory to create a matrix using the specified dimension. Not enough memory to hold matrix calculation result. Not enough memory to store data in list function. Not enough memory to input coefficient for equation. Not enough memory to hold equation calculation result. Not enough memory to hold function input in the Graph Mode for graph drawing. Not enough memory to hold function input in the DYNA Mode for graph drawing. Not enough memory to hold function or recursion input. 	<ul style="list-style-type: none"> Keep the number of variables you use for the operation within the number of variables currently available. Simplify the data you are trying to store to keep it within the available memory capacity. Delete no longer needed data to make room for the new data.
Arg ERROR	<ul style="list-style-type: none"> Incorrect argument specification for a command that requires an argument. 	<ul style="list-style-type: none"> Correct the argument. Lbl n, Goto n : n = integer from 0 through 9.
Dim ERROR	<ul style="list-style-type: none"> Illegal dimension or list used during matrix calculations. 	<ul style="list-style-type: none"> Check matrix or list dimension.
Com ERROR	<ul style="list-style-type: none"> Problem with cable connection or parameter setting during program data communications. 	<ul style="list-style-type: none"> Check cable connection.
Transmit ERROR!	<ul style="list-style-type: none"> Problem with cable connection or parameter setting during data communications. 	<ul style="list-style-type: none"> Check cable connection.
Receive ERROR!	<ul style="list-style-type: none"> Problem with cable connection or parameter setting during data communications. 	<ul style="list-style-type: none"> Check cable connection.
Memory Full!	<ul style="list-style-type: none"> Memory of receiving unit became full during program data communications. 	<ul style="list-style-type: none"> Delete some data stored in the receiving unit and try again.

Appendix D Input Ranges

Function	Input ranges	Internal digits	Accuracy	Notes
$\sin x$ $\cos x$ $\tan x$	(DEG) $ x < 9 \times (10^9)^\circ$ (RAD) $ x < 5 \times 10^7 \pi \text{rad}$ (GRA) $ x < 1 \times 10^{10} \text{grad}$	15 digits	As a rule, accuracy is ± 1 at the 10th digit.*	However, for $\tan x$: $ x \neq 90(2n+1):\text{DEG}$ $ x \neq \pi/2(2n+1):\text{RAD}$ $ x \neq 100(2n+1):\text{GRA}$
$\sin^{-1} x$ $\cos^{-1} x$	$ x \leq 1$	"	"	
	$ x < 1 \times 10^{100}$			
$\sinh x$ $\cosh x$	$ x \leq 230.2585092$	"	"	
	$ x < 1 \times 10^{100}$			
$\sinh^{-1} x$ $\cosh^{-1} x$	$ x < 5 \times 10^{99}$	"	"	
	$1 \leq x < 5 \times 10^{99}$			
	$ x < 1$			
$\log x$ $\ln x$	$1 \times 10^{-99} \leq x < 1 \times 10^{100}$	"	"	
10^x	$-1 \times 10^{100} < x < 100$	"	"	
	$-1 \times 10^{100} < x \leq 230.2585092$			
\sqrt{x}	$0 \leq x < 1 \times 10^{100}$	"	"	
	$ x < 1 \times 10^{50}$			
$1/x$	$ x < 1 \times 10^{100}, x \neq 0$	"	"	
	$ x < 1 \times 10^{100}$			
$x!$	$0 \leq x \leq 69$ (x is an integer)	"	"	
nPr nCr	Result $< 1 \times 10^{100}$	"	"	
	n, r (n and r are integers) $0 \leq r \leq n,$ $n < 1 \times 10^{10}$			
Pol (x, y)	$\sqrt{x^2 + y^2} < 1 \times 10^{100}$	"	"	

Function	Input ranges	Internal digits	Accuracy	Notes
Rec (r, θ)	$ r < 1 \times 10^{100}$ (DEG) $ \theta < 9 \times (10^9)^\circ$ (RAD) $ \theta < 5 \times 10^7 \pi$ rad (GRA) $ \theta < 1 \times 10^{10}$ grad	15 digits	As a rule, accuracy is ± 1 at the 10th digit.*	However, for $\tan \theta$: $ \theta \neq 90(2n+1)$:DEG $ \theta \neq \pi/2(2n+1)$:RAD $ \theta \neq 100(2n+1)$:GRA
$\circ, ,$ \leftarrow $\circ, ,$	$ a , b, c < 1 \times 10^{100}$ $0 \leq b, c$	"	"	
	$ x < 1 \times 10^{100}$ Sexagesimal display: $ x < 1 \times 10^7$			
${}^{\wedge}(x^y)$	$x > 0:$ $-1 \times 10^{100} < y \log x < 100$ $x = 0 : y > 0$ $x < 0 :$ $y = n, \frac{1}{2n+1}$ (n is an integer or a fraction) However; $-1 \times 10^{100} < y \log x < 100$	"	"	
$x\sqrt{y}$	$y > 0 : x \neq 0$ $-1 \times 10^{100} < \frac{1}{x} \log y < 100$ $y = 0 : x > 0$ $y < 0 : x = 2n + 1, \frac{1}{n}$ ($n \neq 0$, n is an integer or a fraction) However; $-1 \times 10^{100} < \frac{1}{x} \log y < 100$	"	"	
$a^{b/c}$	Total of integer, numerator and denominator must be within 10 digits (includes division marks).	"	"	
STAT	$ x < 1 \times 10^{50}$ $ y < 1 \times 10^{50}$ $ n < 1 \times 10^{100}$ $x\sigma_n, y\sigma_n, \bar{x}, \bar{y}, a, b, c, d, e, r :$ $n \neq 0$ $x\sigma_{n-1}, y\sigma_{n-1} : n \neq 0, 1$	"	"	

Appendix D Input Ranges

Function	Input ranges
Binary, octal, decimal, hexadecimal calculation	Values fall within following ranges after conversion: DEC: $-2147483648 \leq x \leq 2147483647$ BIN: $1000000000000000 \leq x \leq 1111111111111111$ (negative) $0 \leq x \leq 0111111111111111$ (0, positive) OCT: $2000000000 \leq x \leq 3777777777$ (negative) $0 \leq x \leq 1777777777$ (0, positive) HEX: $80000000 \leq x \leq FFFFFFFF$ (negative) $0 \leq x \leq 7FFFFFFF$ (0, positive)

*For a single calculation, calculation error is ± 1 at the 10th digit. (In the case of exponential display, calculation error is ± 1 at the last significant digit.) Errors are cumulative in the case of consecutive calculations, which can also cause them to become large. (This is also true of internal consecutive calculations that are performed in the case of ${}^n(x^y)$, $x\sqrt[y]{y}$, $x!$, $\sqrt[3]{x}$, nPr , nCr , etc.)

In the vicinity of a function's singular point and point of inflection, errors are cumulative and may become large.

Appendix E Specifications

Variables: 28

Calculation range:

$\pm 1 \times 10^{-99}$ to $\pm 9.999999999 \times 10^{99}$ and 0. Internal operations use 15-digit mantissa.

Exponential display range: Norm 1: $10^{-2} > |x|, |x| \geq 10^{10}$

Norm 2: $10^{-9} > |x|, |x| \geq 10^{10}$

User memory capacity: fx-9750G PLUS 28,000 bytes (max.)

CFX-9850G PLUS 30,000 bytes (max.)

CFX-9850GB PLUS 30,000 bytes (max.)

CFX-9850GC PLUS 61,000 bytes (max.)

CFX-9950GB PLUS 61,000 bytes (max.)

Power supply:

Main: Four AAA-size batteries (LR03 (AM4) or R03 (UM-4))

Back-up: One CR2032 lithium battery

Power consumption: 0.06W

Approximate battery life

Main (fx-9750G PLUS):

LR03 (AM4): 420 hours (continuous display of main menu)

350 hours continuous operation (5 minutes calculation, 55 minutes display)

R03 (UM-4): 240 hours (continuous display of main menu)

200 hours continuous operation (5 minutes calculation, 55 minutes display)

Main (CFX-9850G PLUS / CFX-9850GB PLUS / CFX-9850GC PLUS / CFX-9950GB PLUS):

LR03 (AM4): 320 hours (continuous display of main menu)

280 hours continuous operation (5 minutes calculation, 55 minutes display)

R03 (UM-4): 180 hours (continuous display of main menu)

160 hours continuous operation (5 minutes calculation, 55 minutes display)

Back-up: 2 years

Auto power off:

Power is automatically turned off approximately 6 minutes after last operation except when drawing dynamic graphs.

The calculator automatically turns off if it is left for about 60 minutes with a calculation stopped by an output command (◀), which is indicated by the “-Disp-” message on the display.

Ambient temperature range: 0°C to 40°C

Dimensions: 24.5 mm (H) × 90.0 mm (W) × 182.5 mm (D)

$\frac{15}{16}$ " (H) × $3\frac{9}{16}$ " (W) × $7\frac{3}{16}$ " (D)

Weight: 215g (7.58 oz) (including batteries)

Data Communications

Functions:

Program contents and file names; function memory data; matrix memory data; list data; variable data; Table & Graph data; graph functions; equation calculation coefficients

Method: Start-stop (asynchronous), half-duplex

Transmission speed (BPS): 9600 bits/second

Parity: none

Bit length: 8 bits

Stop bit:

Send: 3 bits

Receive: 2 bits

X ON/X OFF Control: None

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Key Index

Key	Primary Function	combined with 	combined with 
Trace 	Turns trace function on/off. Selects 1st function menu item.		
Zoom 	Turns zoom function on. Selects 2nd function menu item.		
V-Window 	Displays View Window parameter input screen. Select 3rd function menu item.		
Sketch 	Displays sketch menu. Selects 4th function menu item.		
G-Solv 	Displays graph solve menu. Selects 5th function menu item.		
G ↔ T 	Switches display between graph & text screens. Selects 6th function menu item.		
	Activates shift functions of other keys and function menus.		
	Displays option menu.		
PRGM 	Displays the variable data menu.	Displays program command menu.	
SET UP 	Returns to the Main Menu.	Shows the set up display.	
 	Allows entry of alphanumeric characters shown in red.	Locks/Unlocks entry of alphanumeric characters.	
	Press after entering value to calculate square.	Press before entering value to calculate square root.	Enters character <i>r</i> .
	Press between two values to make second value exponent of first.	Press between entering values for X & Y to show <i>x</i> th root of <i>y</i> .	Enters character θ .
QUIT 	Backsteps to the previous menu.	Returns directly to initial screen of the mode.	
	Moves cursor upward. Scrolls screen.	Switches to previous function in trace mode.	
	Moves cursor downward. Scrolls screen.	Switches to next function in trace mode.	
	Moves cursor to left. Scrolls screen. Press after EXE to display calculation from end.		

Key	Primary Function	combined with SHIFT	combined with ALPHA
▶	Moves cursor to right. Scrolls screen. Press after EXE to display calculation from beginning.		
A [X,θ,T]	Allows input of variable X, θ , and T.		Enters letter A.
10^x B [log]	Press before entering value to calculate common logarithm.	Press before entering exponent value of 10.	Enters letter B.
e^x C [ln]	Press before entering value to calculate natural logarithm.	Press before entering exponent value of e.	Enters letter C.
\sin^{-1} D [sin]	Press before entering value to calculate sine.	Press before entering value to calculate inverse sine.	Enters letter D.
\cos^{-1} E [cos]	Press before entering value to calculate cosine.	Press before entering value to calculate inverse cosine.	Enters letter E.
\tan^{-1} F [tan]	Press before entering value to calculate tangent.	Press before entering value to calculate inverse tangent.	Enters letter F.
d/c G [a/b]	Press between entering fraction values. Converts fraction to decimal.	Displays improper fractions.	Enters letter G.
H [F-D]	Converts a fraction to a decimal value or a decimal value to a fraction. Sends a shot of the current screen to a connected device.		Enters letter H.
$\sqrt[3]{ }$ I [C]	Enters open parenthesis in formula.	Press before entering value to calculate cube root.	Enters letter I.
x^{-1} J [D]	Enters close parenthesis in formula.	Press after entering value to calculate reciprocal.	Enters letter J.
K [,]	Enters comma.		Enters letter K.
L [→]	Assigns value to a value memory name.		Enters letter L.
M [7]	Enters number 7.		Enters letter M.
N [8]	Enters number 8.		Enters letter N.
O [9]	Enters number 9.		Enters letter O.

Key Index

Key	Primary Function	combined with SHIFT	combined with ALPHA
INS DEL	Deletes character at current cursor location.	Allows insertion of characters at cursor location.	
OFF [AC/ON]	Turns power on. Clears the display.	Turns power off.	
P [4]	Enters number 4.		Enters letter P.
Q [5]	Enters number 5.		Enters letter Q.
R [6]	Enters number 6.		Enters letter R.
{ S [X]	Multiplication function.	Enters open curly bracket.	Enters letter S.
} T [÷]	Division function.	Enters close curly bracket.	Enters letter T.
U [1]	Enters number 1.		Enters letter U.
V [2]	Enters number 2.		Enters letter V.
W [3]	Enters number 3.		Enters letter W.
[X [+]	Addition function. Specifies positive value.	Enters open bracket.	Enters letter X.
] Y [−]	Subtraction function. Specifies negative value.	Enters close bracket.	Enters letter Y.
Z [0]	Enters number 0.		Enters letter Z.
= SPACE [.]	Enters decimal point.	Enters character =.	Enters a blank space.
π EXP	Allows entry of exponent.	Inputs value of pi. Enters pi symbol.	
Ans (→)	Enter before value to specify as negative.	Recalls most recent calculation result.	
[EXE]	Displays result of calculation.	Inputs a new line.	

Program Mode Command List

[SETUP] key		
Level 1	Level 2	Level 3
ANGL	Deg	Deg
	Rad	Rad
	Gra	Gra
COOR	On	CoordOn
	Off	CoordOff
GRID	On	GridOn
	Off	GridOff
AXES	On	AxesOn
	Off	AxesOff
LABEL	On	LabelOn
	Off	LabelOff
DISP	Fix	Fix_
	Sci	Sci
	Norm	Norm
	Eng	Eng
P/L	Blue	P/L-Blue
	Orng	P/L-Orange
	Grn	P/L-Green
DRAW	Con	G-Connect
	Plot	G-Plot
DERV	On	DerivOn
	Off	DerivOff
BACK	None	BG-None
	Pict	BG-Pict
FUNC	On	FuncOn
	Off	FuncOff
SIML	On	SimulOn
	Off	SimulOff
S-WIN	Auto	S-WindAuto
	Man	S-WindMan
LIST	File1	File1
	File2	File2
	File3	File3
	File4	File4
	File5	File5
	File6	File6
	Locs	LocusOn
T-VAR	Off	LocusOff
	Rang	VarRange
	LIST	List1 VarList1
		List2 VarList2
		List3 VarList3
		List4 VarList4
		List5 VarList5
		List6 VarList6
	Σ DSP	Σ dispOn
RESID	Off	Σ dispOff
	None	Resid-None
	List	Resid-List_

[VARS] key		
Level 1	Level 2	Level 3
V-WIN	X	min Xmin
		max Xmax
		scal XscI
	Y	min Ymin
		max Ymax
		scal YscI
	T, θ	min Tθ min
		max Tθ max
		pitch Tθ pitch
	R-X	min RightXmin
R-Y		max RightXmax
		scal RightXscI
		min RightYmin
		max RightYmax
		scal RightYscI
	R-T, θ	min RightTθ min
		max RightTθ max
		pitch RightTθ pitch
	FACT	Xfct
		Yfct
STAT	X	n n
		̄x ̄x
		Σx Σx
		Σx² Σx²
		xσn xσn
		xσn-1 xσn-1
		minX minX
		maxX maxX
	Y	ȳ ȳ
		Σy Σy
GRPH		Σy² Σy²
		Σxy Σxy
		yσn yσn
		yσn-1 yσn-1
		minY minY
		maxY maxY
	a	a
	b	b
	c	c
	d	d
DYNA	e	e
	r	r
	Q1	Q1
	Med	Med
	Q3	Q3
	Mod	Mod
	Strt	H_Start
TABL	Pitch	H_pitch
	Reslt	F_Result

PTS	x1	x1	RECR	an	an
	y1	y1		an+1	an+1
	x2	x2		an+2	an+2
	y2	y2		bn	bn
	x3	x3		bn+1	bn+1
	y3	y3		bn+2	bn+2
TEST	n	n	RANG	Strt	R_Start
	̄x	̄x		End	R_End
	xσn-1	xσn-1		ao	ao
	n1	n1		a1	a1
	n2	n2		a2	a2
	x1	x1		bo	bo
	x2	x2		b1	b1
	x1σ	x1σn-1		b2	b2
	x2σ	x2σn-1		anSt	anStart
	xpσ	xpσn-1		bnSt	bnStart
	F	F	Rest		R_Result
	Fdf	Fdf	EQUA	S-Rlt	Sim_Result
	SS	SS		S-Cof	Sim_Coef
	MS	MS		P-Rlt	Ply_Result
	Edf	Edf		P-Cof	Ply_Coef
	SSe	SSe	TVM	n	n
	MSe	MSe		I%	I%
RESLT	p	p		PV	PV
	z	z		PMT	PMT
	t	t		FV	FV
	Chi	χ²		P/Y	P/Y
	F	F		C/Y	C/Y
	Left	Left			
	Right	Right			
	̄p	̄p			
	̄p1	̄p1			
	̄p2	̄p2			
	df	df			
	s	s			
	r	r			
	r²	r²			
GRPH	Y	Y			
	r	r			
	Xt	Xt			
	Yt	Yt			
	X	X			
DYNA	Strt	D_Start			
	End	D_End			
	Pitch	D_pitch			
TABL	Strt	F_Start			
	End	F_End			
	Pitch	F_pitch			
	Reslt	F_Result			

[PRGM] key			
Level 1	Level 2	Level 3	Command
COM	If	If	
	Then	Then_	
	Else	Else_	
	I-End	IIfEnd	
	For	For_	
	To	To_	
	Step	Step_	
	Next	Next	
	While	While_	
	WEnd	WhileEnd	
CTL	Do	Do	
	Lp-W	LpWhile_	
	Prog	Prog_	
	Rtrn	Return	
	Brk	Break	
JUMP	Stop	Stop	
	Lbl	Lbl	
	Goto	Goto_	
	⇒	⇒	
	Isz	Isz_	
CLR	Dsz	Dsz	
	?	?	
	▲	▲	
	Text	ClrText	
DISP	Grph	ClrGraph	
	List	ClrList	
	Stat	DrawStat	
F-Tbl	Grph	DrawGraph	
	Dyna	DrawDyna	
	Tabl	DispF-Tbl	
R-Tbl	G-Con	DrawFTG-Con	
	G-Pt	DrawFTG-Pt	
	Tabl	DispR-Tbl	
	Web	DrawWeb_	
REL	an-Cn	DrawR-Con	
	Σa-Cn	DrawR Σ-Con	
	an-Pl	DrawR-Plt	
	Σa-Pl	DrawR Σ-Plt	
I/O	=	=	
	≠	≠	
	>	>	
	<	<	
	≥	≥	
	≤	≤	
	Lcte	Locate_	
	Gtky	Getkey	
	Send	Send(
	Recv	Receive(
	:	:	

[SHIFT] key			
Level 1	Level 2	Level 3	Command
ZOOM	Fact	Factor_	
	V-Win	ViewWindow_	
	Sto	StoV-Win_	
	Rcl	RclIV-Win_	
	SKTCH	Cls	Cls
	Tang	Tangent_	
	Norm	Normal_	
	Inv	Inverse_	
	GRPH	Y= Graph_Y=	
	r=	Graph r=	
PLOT	Parm	Graph(X,Y)=	
	X=c	Graph_X=	
	G-/dx	Graph_ /	
	Y>	Graph_Y>	
	Y<	Graph_Y<	
	Y≥	Graph_Y≥	
	Y≤	Graph_Y≤	
	Plot	Plot_	
	Pt-On	PlotOn	
	Pt-Off	PlotOff_	
LINE	Pt-Chg	PlotChg_	
	Line	Line	
	F-Line	F-Line_	
	Crcl	Circle_	
	Vert	Vertical_	
LIST	Hztl	Horizontal_	
	Text	Text_	
	PixL	Px1On	
		Off Px1Off_	
	Chg	Px1Chg_	
MARK	Test	Px1Test_	

[F4](MENU) key			
Level 1	Level 2	Level 3	Command
STAT	DRAW	On	DrawOn
		Off	DrawOff
	GRPH	GPH1	S-Gph1
		GPH2	S-Gph2_
		GPH3	S-Gph3_
		Scat	Scatter
		xy	xyLine
		Hist	Hist
		Box	MedBox
		Box	MeanBox
COLR	N-Dis	N-Dist	
	Brkn	Broken	
	X	Linear	
	Med	Med-Med	
	X^2	Quad	
	X^3	Cubic	
	X^4	Quart	
	Log	Log	
	Exp	Exp	
	Pwr	Power	
GMEM	Sin	Sinusoidal	
	NPP	NPPlot	
	Lgst	Logistic	
	TYPE	Y=	Y-Type
		r=	r-Type
		Parm	ParamType
	TABL	On	T_SelOn
		Off	T_SelOff
	Var		D_Var
	TYPE	Y=	Y-Type
RECR	Blue	Blue	BlueG
	Orng	Orng	OrangeG
	Grn	Grn	GreenG
	SEL+C	On	R_SelOn
		Off	R_SelOff
	Blue		BlueG
	Orng		OrangeG
	Grn		GreenG
	SEL	On	R_SelOn
		Off	R_SelOff
CALC	1VAR	1-Variable	
	2VAR	2-Variable	
	X	LinearReg_	
	Med	Med-Medline	
	X^2	QuadReg_	
	X^3	CubicReg_	
	X^4	QuartReg_	
	Log	LogReg_	
	Exp	ExpReg_	
	Pwr	PowerReg_	
MAT	Sin	SinReg_	
	Lgst	LogisticReg_	
	Swap	Swap_	
	xRw	*Row_	
	xRw+	*Row+_	
	Rw+	Row+_	

LIST	Srt-A	SortA(
	Srt-D	SortD(
GRPH	SEL	On G_SelOn
		Off G_SelOff
TYPE	Y=	Y-Type
	r=	r-Type
	Parm	ParamType
	X=c	X=Type
	Y>	Y>Type
	Y<	Y<Type
	Y≥	Y≥Type
	Y≤	Y≤Type
COLR	Blue	BlueG
	Orng	OrangeG
	Grn	GreenG
GMEM	Sto	StoGMEM
	Rcl	RclGMEM
DYNA	On	D_SelOn
	Off	D_SelOff
	Var	D_Var
TYPE	Y=	Y-Type
	r=	r-Type
	Parm	ParamType
TABL	On	T_SelOn
	Off	T_SelOff
TYPE	Y=	Y-Type
	r=	r-Type
	Parm	ParamType
	Blue	BlueG
	Orng	OrangeG
	Grn	GreenG
RECR	SEL+C	On R_SelOn
		Off R_SelOff
	Blue	BlueG
	Orng	OrangeG
	Grn	GreenG
SEL	On	R_SelOn
(fx-9750G PLUS)		Off R_SelOff
TYPE	an	anType
	an+1	an+1Type
	an+2	an+2Type
n.an..	n	n
	an	an
	an+1	an+1
	bn	bn
	bn+1	bn+1

[F6](SYBL) key			
Level 1	Level 2	Level 3	Command
'		"	
"		"	
~		~	
*		*	
/		/	
#		#	

[ALPHA] key			
Level 1	Level 2	Level 3	Command
'		'	
"		"	
~		~	
*		*	
/		/	
#		#	

[OPTN] key			
Level 1	Level 2	Level 3	Command
LIST	List	List	
L→M		List→Mat(
Dim		Dim	
Fill		Fill(
Seq		Seq(
Min		Min(
Max		Max(
Mean		Mean(
Med		Median(
Sum		Sum	
Prod		Prod	
Cuml		Cuml	
%		Percent	
Δ		ΔList	
MAT	Mat	Mat	
M→L		Mat→List(
Det		Det	
Trn		Trn	
Aug		Augment(
Iden		Identity	
Dim		Dim	
Fill		Fill(
CPLX	i	i	
Abs		Abs	
Arg		Arg	
Conj		Conjg	
ReP		ReP	
ImP		ImP	
CALC	Solve	Solve(
d/dx		d/dx(
d²/dx²		d²/dx²(
∫ dx		∫(
FMin		FMin(
FMax		FMax(
Σ(Σ(
STAT	ŷ	ŷ	
COLR	Orng	Orange	
◆	Grn	Green	
HYP	sinh	sinh	
	cosh	cosh	
	tanh	tanh	
	sinh⁻¹	sinh⁻¹	
	cosh⁻¹	cosh⁻¹	
	tanh⁻¹	tanh⁻¹	

PROB	X!	!
nPr	P	
nCr	C	
Ran#	Ran#	
P(P(
Q(Q(
R(R(
t(t(
NUM	Abs	Abs
	Int	Int
	Frac	Frac
	Rnd	Rnd
	Intg	Intg
ANGL	o	o
	r	r
	g	g
	o "	□
	Pol(Pol(
	Rec(Rec(
ESYM	m	m
	μ	μ
	n	n
	p	p
	f	f
	k	k
	M	M
	G	G
	T	T
	P	P
	E	E
PICT	Sto	StoPict
	Rcl	RclPict
FMEM	fn	f1 f1
		f2 f2
		f3 f3
		f4 f4
		f5 f5
		f6 f6
LOGIC	And	And
	Or	Or
	Not	Not

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT IN THE U.S.A. (not applicable to other areas).

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Proper connectors must be used for connection to host computer and/or peripherals in order to meet FCC emission limits.

Connector SB-62	Power Graphic Unit to Power Graphic Unit
Connector FA-123	Power Graphic Unit to PC for IBM/Macintosh Machine

Declaration of Conformity

Model Number: fx-9750G PLUS/CFX-9850G PLUS/CFX-9850GB PLUS/CFX-9950GB PLUS
Trade Name: CASIO COMPUTER CO., LTD.
Responsible party: CASIO, INC.
Address: 570 MT. PLEASANT AVENUE, DOVER, NEW JERSEY 07801
Telephone number: 973-361-5400

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CASIO[®]

CASIO COMPUTER CO., LTD.

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