

C47 Keyboard listing per category

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
Bits and bytes	[BITS]	g [4]	6	2	Bitwise functions	Bitwise functions	MENU	BITS	
Catalog	[CAT]	f [+]	8	5	Catalog	Catalog of all items (functions, characters, programs, variables, menus) (Info : Press [EXIT] to exit catalogs)	MENU	CATALOG	
	[CAT]	alpha f [+]	8	5	Catalog (alpha)	Catalog of items available in Alpha Input Mode (Info : CAT [EQN] is available on keyboard f [+] in EIM)	MENU	CATe	
	[CNST]	g [+]	8	5	Constants	Important scientific and technical constants (Info : In Program Entry Mode, constants selected from the menu are stored in programs as "# ", the reference number, the label and the abbreviated name ; in the equation editor the label is simply preceded by "#" ; Type characters 1-2 to search ; TI : <constant abbreviation> = <value> ; Ref : https://47calc.com/doc/C47/Reference/C47_Constants.pdf)	MENU (ASM)	CNST	
Characters	_	alpha [-]	7	5	Underscore	Character _ (Fontcode : 005F ₁₆)	Character		
	-	alpha g [-]	7	5	Minus	Minus (Shortcut : alpha g [-] ; Info : Fontcode : 002D ₁₆)	Character		
	,	alpha [.]	8	3	Comma	Character , (Fontcode : 002C ₁₆)	Character		
	;	alpha f [0]	8	2	Semicolon	Character ; (Shortcut : alpha f [0] ; Info : Fontcode : 003B ₁₆)	Character		
	:	alpha [0]	8	2	Colon	Character : ; in the equation editor, the colon can be used to name an expression (<name> : <expression>) (Shortcut : alpha [0] ; Fontcode : 003A ₁₆)	Character		
	?	alpha [R/S]	8	4	Question mark	Character ? (Fontcode : 003F ₁₆)	Character		
	.	alpha g [.]	8	3	Full stop	Character . (Shortcut : alpha g [.] ; Info : Fontcode : 002E ₁₆)	Character		
	.	TAM [.]	8	3	Full stop	Character . (Shortcut : alpha g [.] ; Info : Fontcode : 002E ₁₆)	Character		
	/	alpha g [R/S]	8	4	Slash	Character / (Shortcut : alpha g [R/S] ; Info : Fontcode : 002F ₁₆)	Character		
	↵	alpha g [ENTER]	4	1	Carriage return	Character ↵ (Shortcut : alpha g [ENTER] ; alpha longer [ENTER] ; EIM longer [ENTER] ; Info : Fontcode : 21B5 ₁₆)	Character		
	↔	alpha g [x↔y]	4	2	Left right arrow	Character ↔ (Shortcut : alpha g [x↔y] ; Info : Fontcode : 21C4 ₁₆)	Character		
	+	alpha g [+]	8	5	Plus	Plus (Shortcut : alpha g [+] ; Info : Fontcode : 002B ₁₆)	Character		
	±	alpha g [+/-]	4	3	Plus-minus	Character ± (Shortcut : alpha g [+/-] ; Info : Fontcode : 00B1 ₁₆)	Character		
	÷	alpha g [÷]	5	5	Obelus	Character ÷ (Shortcut : alpha g [÷] ; Info : Fontcode : 00F7 ₁₆)	Character		
	×	alpha g [x]	6	5	Cross	Character × (Shortcut : alpha g [x] ; Info : Fontcode : 00D7 ₁₆)	Character		
	<E>	alpha g [E]	4	4	Exponent sign (AIM)	Character E (displays as outline E in numeric font) (Shortcut : alpha g [E] ; Info : Fontcode : 2073 ₁₆)	Character		
	␣	alpha [+]	8	5	Space	Character " " (Fontcode : 0020 ₁₆)	Character		
	a	alpha f [Σ+]	2	1	a	Character a (Fontcode : 0061 ₁₆)	Character		
	b	alpha f [1/x]	2	2	b	Character b (Fontcode : 0062 ₁₆)	Character		
	c	alpha f [√x]	2	3	c	Character c (Fontcode : 0063 ₁₆)	Character		
	d	alpha f [LOG]	2	4	d	Character d (Fontcode : 0064 ₁₆)	Character		
	e	alpha f [LN]	2	5	e	Character e (Fontcode : 0065 ₁₆)	Character		
	ø	alpha f [-]	7	5	eEuler	Character ø (Shortcut : alpha f [-] ; Info : Fontcode : 2147 ₁₆)	Character		
	f	alpha f [XEQ]	2	6	f	Character f (Fontcode : 0066 ₁₆)	Character		
	G	alpha [ST0]	3	1	G	Character G (Fontcode : 0047 ₁₆)	Character		
	g	alpha f [ST0]	3	1	g	Character g (Fontcode : 0067 ₁₆)	Character		
	H	alpha [RCL]	3	2	H	Character H (Fontcode : 0048 ₁₆)	Character		
	h	alpha f [RCL]	3	2	h	Character h (Fontcode : 0068 ₁₆)	Character		
	I	alpha [R↓]	3	3	I	Character I (Fontcode : 0049 ₁₆)	Character		
	i	alpha f [R↓]	3	3	i	Character i (Fontcode : 0069 ₁₆)	Character		
	J	alpha [SIN]	3	4	J	Character J (Fontcode : 004A ₁₆)	Character		
	j	alpha f [SIN]	3	4	j	Character j (Fontcode : 006A ₁₆)	Character		
	K	alpha [COS]	3	5	K	Character K (Fontcode : 004B ₁₆)	Character		
	k	alpha f [COS]	3	5	k	Character k (Fontcode : 006B ₁₆)	Character		
	L	alpha [TAN]	3	6	L	Character L (Fontcode : 004C ₁₆)	Character		
	l	alpha f [TAN]	3	6	l	Character l (Fontcode : 006C ₁₆)	Character		
	M	alpha [x↔y]	4	2	M	Character M (Fontcode : 004D ₁₆)	Character		
	m	alpha f [x↔y]	4	2	m	Character m (Fontcode : 006D ₁₆)	Character		
	N	alpha [+/-]	4	3	N	Character N (Fontcode : 004E ₁₆)	Character		
	n	alpha f [+/-]	4	3	n	Character n (Fontcode : 006E ₁₆)	Character		
	O	alpha [E]	4	4	O	Character O (Fontcode : 004F ₁₆)	Character		
	o	alpha f [E]	4	4	o	Character o (Fontcode : 006F ₁₆)	Character		

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	P	alpha [7]	5	2	P	Character P (Fontcode : 0050 ₁₆)	Character		
	p	alpha f[7]	5	2	p	Character p (Fontcode : 0070 ₁₆)	Character		
	Q	alpha [8]	5	3	Q	Character Q (Fontcode : 0051 ₁₆)	Character		
	q	alpha f[8]	5	3	q	Character q (Fontcode : 0071 ₁₆)	Character		
	R	alpha [9]	5	4	R	Character R (Fontcode : 0052 ₁₆)	Character		
	r	alpha f[9]	5	4	r	Character r (Fontcode : 0072 ₁₆)	Character		
	S	alpha [÷]	5	5	S	Character S (Fontcode : 0053 ₁₆)	Character		
	s	alpha f[÷]	5	5	s	Character s (Fontcode : 0073 ₁₆)	Character		
	T	alpha [4]	6	2	T	Character T (Fontcode : 0054 ₁₆)	Character		
	t	alpha f[4]	6	2	t	Character t (Fontcode : 0074 ₁₆)	Character		
	U	alpha [5]	6	3	U	Character U (Fontcode : 0055 ₁₆)	Character		
	u	alpha f[5]	6	3	u	Character u (Fontcode : 0075 ₁₆)	Character		
	V	alpha [6]	6	4	V	Character V (Fontcode : 0056 ₁₆)	Character		
	v	alpha f[6]	6	4	v	Character v (Fontcode : 0076 ₁₆)	Character		
	W	alpha [x]	6	5	W	Character W (Fontcode : 0057 ₁₆)	Character		
	w	alpha f[x]	6	5	w	Character w (Fontcode : 0077 ₁₆)	Character		
	X	alpha [1]	7	2	X	Character X (Fontcode : 0058 ₁₆)	Character		
	x	alpha f[1]	7	2	x	Character x (Fontcode : 0078 ₁₆)	Character		
	Y	alpha [2]	7	3	Y	Character Y (Fontcode : 0059 ₁₆)	Character		
	y	alpha f[2]	7	3	y	Character y (Fontcode : 0079 ₁₆)	Character		
	Z	alpha [3]	7	4	Z	Character Z (Fontcode : 005A ₁₆)	Character		
	z	alpha f[3]	7	4	z	Character z (Fontcode : 007A ₁₆)	Character		
	α	alpha g[XEQ]	2	6	alpha	Character α (Shortcut : alpha g[XEQ] ; Info : Fontcode : 03B1 ₁₆ ; press [▲] for A at [A...Ω.1] F1)	Character		
	Δ	alpha g[RCL]	3	2	DELTA	Character Δ (Shortcut : alpha g[RCL] ; Info : Fontcode : 0394 ₁₆ ; press [▼] for δ at [α...ω.1] F4)	Character		
	Σ	alpha g[Σ+]	2	1	SIGMA	Character Σ (Shortcut : alpha g[Σ+] ; Info : Fontcode : 03A3 ₁₆ ; press [▼] for σ at [α...ω.2] F2)	Character		
Cleanup	←	[←]	4	5	Backspace	Backspace : clear input when in Numeric Input Mode ; when not in NIM, executes DROPx ; CLX depending on whether flag ←DROP is SET or CLEAR (default CLEAR) (TAM : BACK __ TamNonReg menu)	Command (nonpgm)	BACK	
	←	alpha [←]	4	5	Backspace	Backspace : clear input when in Numeric Input Mode ; when not in NIM, executes DROPx ; CLX depending on whether flag ←DROP is SET or CLEAR (default CLEAR) (TAM : BACK __ TamNonReg menu)	Command (nonpgm)	BACK	
	←	TAM [←]	4	5	Backspace	Backspace : clear input when in Numeric Input Mode ; when not in NIM, executes DROPx ; CLX depending on whether flag ←DROP is SET or CLEAR (default CLEAR) (TAM : BACK __ TamNonReg menu)	Command (nonpgm)	BACK	
	←	#TAM [←]	4	5	Backspace	Backspace : clear input when in Numeric Input Mode ; when not in NIM, executes DROPx ; CLX depending on whether flag ←DROP is SET or CLEAR (default CLEAR) (TAM : BACK __ TamNonReg menu)	Command (nonpgm)	BACK	
	[CLR]	g[←]	4	5	Clear	Clear flags, programs, registers, stacks, variables and reset calculator	MENU	CLR	
Complex and coordinates	→P	g[TAN]	3	6	To polar	Transform rectangular to polar coordinates (dyadic, stack conventions according to flag RP _{HP} SET or CLEAR) ; transform Complex number or 2D/3D vector to polar notation (monadic) and set POLAR tag (TI : r = ; θ = (POLAR) ; Info : in Program Entry Mode, flag RP _{HP} determines whether →POL _{HP} or →POL _{CX} is stored ; for a 3D vector in X, function →POLAR (→P) cycles through →SPH, then →CYL ; vector display depends on flag 3Dxyz, for 2D polar vector : [rθ _i] [v ₁ v ₂] ^P ; 3D spherical vector : [ρθ _i φ _k] _H [v ₁ v ₂ v ₃] ^S ; 3D cylindrical vector : [rθ _i k] [v ₁ v ₂ v ₃] ^C	Function (monadic, dyadic)	→POLAR	
	→R	g[COS]	3	5	To rectangular	Transform polar to rectangular coordinates (dyadic, stack conventions according to flag RP _{HP} SET or CLEAR) ; transform Complex number or 2D/3D vector to rectangular notation (monadic) and set RECT tag (TI : x : Re = ; y : Im = (RECT) ; Info : in Program Entry Mode, flag RP _{HP} determines whether →RECT _{HP} or →RECT _{CX} is stored ; vector display depends on flag 3Dxyz, for 2D rectangular vector : [ij] [v ₁ v ₂] ; 3D rectangular vector : [ijk] [v ₁ v ₂ v ₃]	Function (monadic, dyadic)	→RECT	
Complex numbers	x	f[STO]	3	1	Magnitude	Magnitude (absolute value) of Complex number	Function (monadic)	x	
	∠	g[STO]	3	1	Argument (angle)	Argument (angle) of Complex number	Function (monadic)	∠	
	COMPLEX	f[ENTER]	4	1	Complex number	Convert to or from Complex number (2.0-2.5)	Function (dyadic)	COMPLEX	

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
	[CPX]	g[ENTER]	4	1	Complex functions	Complex functions (Ref : https://47calc.com/doc/Application%20Notes/AN0001_C47_R47_JM_Complex_number_engineering_example.pdf)	MENU	CPX	
	i	g[SIN]	3	4	Complex number (rectangular notation)	Enter complex number (rectangular notation) whether RECT is set or not ; e.g. a i b ENTER results in a + b i (Info : In NIM, works like CC with RECT set ; displayed according to flag CPXj when in RECT mode)	Command	op_ i	
Constants	π	f[R+]	3	3	pi	Enter value of pi on the stack	Command		
Customisation	[HOME]	g[7]	5	2	HOME	User menu to quickly access user selected menus and functions ; all buttons are user assignable ('riveted' look) ; initially populated for basic scitech options ; reset using HOME.R (Shortcut : triple [f/g] (because HOME $\neq$ is SET) ; longerpress [f/g] (because HOME $\neq$ is SET))	MENU	HOME	
	[HOME*]	triple [f/g]	7	1	HOME	User menu to quickly access user selected menus and functions ; all buttons are user assignable ('riveted' look) ; initially populated for basic scitech options ; reset using HOME.R (Shortcut : triple [f/g] (because HOME $\neq$ is SET) ; longerpress [f/g] (because HOME $\neq$ is SET))	MENU	HOME	
	[KEYS]	g[1]	7	2	Keys	Layouts, ribbons and special key assignments (Ref : https://47calc.com/doc/C47/Reference/C47_Keyboards_side_by_side.pdf)	MENU	KEYS	
	USER	f[2]	7	3	USER mode	Switch on xxx ; not programmable - in PEM, use flag USER (Info : To assign USER to a key or button, use ASN (f[1]) and spell the name as 'USER' ; during assignment, pressing USER (f[2]) opens MyMenu ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Setting		OFF
Display	[DISP]	f[E]	4	4	Display settings	Display settings (Info : On DISP page 3, special indicators are used : $\diamond$: all group settings comply, $\circ$: ≥ 1 group settings differ ; Ref : https://47calc.com/doc/Application%20Notes/AN0028_C47_R47_JM_Configurability_Tour.pdf)	MENU	DISP	
Equations	[EQN]	f[7]	5	2	Equation editor	Equation editor to enter multiple expressions (Info : EIM = Equation Input Mode ; when no expression has been entered, only button NEW is shown in this menu ; when two or more expressions have been entered, use [$\blacktriangle$] or [$\blacktriangledown$] to select ; menu CAT [EQN] is available on keyboard f[+] in EIM ; Ref : https://47calc.com/doc/C47/Reference/C47_Equation_editor.pdf)	MENU	EQN	
Financial	%	f[RCL]	3	2	Percent	X Percent of Y, keeping Y on stack -- see Formula_PC.png : https://47calc.com/doc/Images/Formula_PC.png	Function (dyadic)	%	
	[FIN]	g[8]	5	3	Financial	Financial calculations including time value of money (TVM) and TVM cash flow (Ref : https://47calc.com/doc/C47/Reference/C47_Formulas.pdf)	MENU	FIN	
	$\Delta\%$	g[RCL]	3	2	Delta percent	Delta percentage from Y to X, keeping Y on stack -- see Formula_DELTAPC.png : https://47calc.com/doc/Images/Formula_DELTAPC.png (TI : $\Delta\%$:)	Function (dyadic)	$\Delta\%$	
Fractions	a^b/c	g[Σ +]	2	1	Fractions modes	Set and cycle fractions modes : proper (mixed), improper fractions (denominator determined by DMX, DENFIX, DENANY) ; or fractional approximations including irrationals ; exit fractions mode via .d (g[LOG]) ; starts in mode last used or as set by flags PROPFR, FRACT and IRFRAC ; When FRCYC is SET full cycle is available, when CLEAR, flag PROPFR is excluded (used as is) and OFF state is included in cycle (Shortcut : <a> [.] [.] <c> ; Info : IRFRAC and FRACT are linked (both cannot be SET at the same time) ; SBI $\times 1$ or $\cdot 1$ indicates that approximate multiples or fractions can be used, of the irrational numbers $\sqrt{2}$, $\sqrt{3}$, $\sqrt{5}$, $\sqrt{7}$, ϕ , π^{-2} , π^{-1} , $\sqrt{\pi}$, π , π^2 , e^{-2} , e^{-1} , e and e^2 (with tolerance 10^{-24}) ; Prefix $\approx$ + <approximation> ; multiplication symbol SET for displaying multiplication symbol $\times$; SBI is shown if flag SBfrac is SET ; Ref : https://47calc.com/doc/C47/Reference/C47_Fractions.pdf)	Setting (cyclic, pgm, stack)		OFF
	FP	#TAM [XEQ]	2	6	Fractional Part	Fractional Part of real number (Shortcut : #TAM [XEQ] (F) for closed number)	Function (monadic)	FP	
	IP	#TAM [R+]	3	3	Integer Part	Integer Part of number (returns Real number) (Shortcut : #TAM [R+] (I) for closed number)	Function (monadic)	IP	
Function key	F1	[0]	1	1	Function key 1 :	Function key 1 : unshifted keyboard	F-key		
	F2	[0]	1	2	Function key 2 :	Function key 2 : unshifted keyboard	F-key		
	F3	[0]	1	3	Function key 3 :	Function key 3 : unshifted keyboard	F-key		
	F4	[0]	1	4	Function key 4 :	Function key 4 : unshifted keyboard	F-key		
	F5	[0]	1	5	Function key 5 :	Function key 5 : unshifted keyboard	F-key		
	F6	[0]	1	6	Function key 6 :	Function key 6 : unshifted keyboard	F-key		
Information	[INFO]	g[.]	8	3	Information	System information and some information about the value in the X-register	MENU	INFO	
Input-Output	[I/O]	g[-]	7	5	Input/Output	I/O functions (read/load, write/save, export program, in-export registers, SNAP, audio, print)	MENU	I/O	

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
	SNAP	g[EXIT]	8	1	Screenshot	Save screenshot to backup file (.bmp) and save contents of stack or alpha buffer as backup file (.REGS.TSV) in FAT ; plays clicking sound (Shortcut : [f/g] + [E] (DMCP-shortcut for screenshot bitmap only) ; Info : screenshot is saved in file SCREENS/<YYYYMMDD-HHMMSS00>.bmp ; SNAP also appends data to file DATA/<YYYYMMDD-HHMMSS00>.REGS.TSV ; new datafile after timeout of 2 minutes)	Command	SNAP	
	SNAP	alpha g[EXIT]	8	1	Screenshot	Save screenshot to backup file (.bmp) and save contents of stack or alpha buffer as backup file (.REGS.TSV) in FAT ; plays clicking sound (Shortcut : [f/g] + [E] (DMCP-shortcut for screenshot bitmap only) ; Info : screenshot is saved in file SCREENS/<YYYYMMDD-HHMMSS00>.bmp ; SNAP also appends data to file DATA/<YYYYMMDD-HHMMSS00>.REGS.TSV ; new datafile after timeout of 2 minutes)	Command	SNAP	
Integers	→I	f[Σ+]	2	1	To integer	Convert to Long integer (0), Short integer (8.02-8.16) (cyclic, max 1000 digits) (Info : Short integer indicated by subscript ₁₀ ; can show TI: 0vrfl<0; or 0vrfl>64 bits : which can be abbreviated as 0F, indicating overflow condition)	Function (monadic, cyclic)	→I	
	[INTS]	g[x]	6	5	Integers	Short integer functions	MENU	INTS	
Keyboard	<g>*	double [f/g]	7	1	Shift g	Shift g (blue) (Shortcut : double [f/g] ; longpress [f/g] ; Info : SBI position depends on flag SBshfR)	g-shift	g	
	f/g	[f/g]	7	1	Shift f/g	Single press : shift f (yellow) ; double press : shift g (blue) (Info : SBI f ; g is shown if flag SBshfR is SET ; note that USER mode assignment to longerpress f/g is possible, if either HOME ^g or MyM ^g is SET, see Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	f/g-shift	f/g	
	f/g	alpha [f/g]	7	1	Shift f/g	Single press : shift f (yellow) ; double press : shift g (blue) (Info : SBI f ; g is shown if flag SBshfR is SET ; note that USER mode assignment to longerpress f/g is possible, if either HOME ^g or MyM ^g is SET, see Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	f/g-shift	f/g	
	f/g	TAM [f/g]	7	1	Shift f/g	Single press : shift f (yellow) ; double press : shift g (blue) (Info : SBI f ; g is shown if flag SBshfR is SET ; note that USER mode assignment to longerpress f/g is possible, if either HOME ^g or MyM ^g is SET, see Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	f/g-shift	f/g	
	f/g	#TAM [f/g]	7	1	Shift f/g	Single press : shift f (yellow) ; double press : shift g (blue) (Info : SBI f ; g is shown if flag SBshfR is SET ; note that USER mode assignment to longerpress f/g is possible, if either HOME ^g or MyM ^g is SET, see Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	f/g-shift	f/g	
Mathematics	-	[-]	7	5	Subtract	Subtract X from Y	Function (dyadic)	-	
	-	TAM [-]	7	5	Subtract	Subtract X from Y	Function (dyadic)	-	
	÷	[÷]	5	5	Divide	Divide Y by X	Function (dyadic)	÷	
	÷	TAM [÷]	5	5	Divide	Divide Y by X	Function (dyadic)	÷	
	×	[x]	6	5	Multiply	Multiply Y by X	Function (dyadic)	×	
	×	TAM [x]	6	5	Multiply	Multiply Y by X	Function (dyadic)	×	
	√x	[√x]	2	3	Square root	Square root of X (Info : When X is a matrix √x calculates its square root (MSQRT))	Function (monadic)	√x	
	∛y	g[R+]	3	3	xth root	Xth root of Y	Function (dyadic)	∛y	
	10 ^x	f[LOG]	2	4	10 to the power x	Raise 10 to the power in the X-register	Function (monadic)	10 ^x	
	e ^x	f[LN]	2	5	e to the power x	Raise e to the power in the X-register	Function (monadic)	e ^x	
	[EXP]	g[E]	4	4	Exponential	Exponential functions	MENU	EXP	
	1/x	[1/x]	2	2	Reciprocal	Reciprocal (1/X) (Info : When X is a matrix 1/x inverts it ([M] ⁻¹))	Function (monadic)	1/x	
	LN	[LN]	2	5	Natural logarithm	Natural logarithm (base e)	Function (monadic)	LN	
	LOG	[LOG]	2	4	Common logarithm	Common logarithm (base 10)	Function (monadic)	LOG	
	[X.FN]	g[9]	5	4	Extended functions	Extended functions (Bessel, Bernoulli, Gamma, Elliptical, Orthogonal, etcetera) (Ref : https://47calc.com/doc/C47/Reference/C47_Prime_numbers.pdf)	MENU	X.FN	
	x ²	f[√x]	2	3	Square	Square of X	Function (monadic)	x ²	
	y ^x	f[1/x]	2	2	y to the power x	Raise value in the Y-register to the power in the X-register	Function (dyadic)	y ^x	
Mathematics and characters	!	alpha f[R/S]	8	4	Exclamation mark	In edit equation, used as Factorial x! or Γ(x+1) (Shortcut : alpha f[R/S] ; Fontcode : 0021 ₁₆)	Character		
	^	alpha g[1/x]	2	2	Circumflex accent	Raise to power (Shortcut : alpha g[1/x] ; Fontcode : 005E ₁₆)	Character		
		alpha g[ST0]	3	1	Bar	Open or close absolute value (Shortcut : alpha g[ST0] ; Fontcode : 007C ₁₆)	Character		
	√	alpha g[√x]	2	3	Square root	Square root (Shortcut : alpha g[√x] ; Fontcode : 221A ₁₆)	Character		
	LN	alpha g[LN]	2	5	Natural logarithm (string)	Natural logarithm (base e) (Shortcut : alpha g[LN] ("LN"))	Character		

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	LOG	alpha g [LOG]	2	4	Common logarithm (string)	Common logarithm (base 10) (Shortcut : alpha g [LOG] ("LOG"))	Character		
	π	alpha g [R π]	3	3	pi	Greek character π (Shortcut : alpha g [R π] ; Info : Fontcode : 03C0 ₁₆ ; press [$\blacktriangle$] for Π at [A...Ω.1] gF5)	Character		
Mathematics and text functions	+	[+]	8	5	Add	Add X to Y ; concatenate X and Y, including numbers, dates and times + strings and vice versa	Function (dyadic)	+	
	+	TAM [+]	8	5	Add	Add X to Y ; concatenate X and Y, including numbers, dates and times + strings and vice versa	Function (dyadic)	+	
Matrix operations	[MATX]	f [9]	5	4	Matrix	Matrix functions ; a matrix is displayed in X and shown in other stack registers as [m×n Matrix] or [m×n C Matrix] when containing complex element(s) (Ref : https://47calc.com/doc/Application%20Notes/AN0020_C47_R47_Matrix_and_Vector.pdf ; Info : monadic functions work per matrix element (except 1/x, which is a shortcut for [M] ⁻¹ , use - 1 y* instead ; and $\sqrt{x}$, which is a shortcut for MSQRT, use 0.5 y* instead) ; in edit mode, all functions work per element ; use registers to input calculation results)	MENU	MATX	
Navigation	$\blacktriangle$	[$\blacktriangle$]	5	1	Up	Scroll up for menus and browser screens or backstep through program steps (Info : To assign $\blacktriangle$ to a key or button, use ASN (f [1]) and spell the name as 'UP' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
	$\blacktriangle$	TAM [$\blacktriangle$]	5	1	Up	Scroll up for menus and browser screens or backstep through program steps (Info : To assign $\blacktriangle$ to a key or button, use ASN (f [1]) and spell the name as 'UP' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
	$\blacktriangledown$	[$\blacktriangledown$]	6	1	Down	Scroll down for menus and browser screens or single step through program steps (Info : To assign $\blacktriangledown$ to a key or button, use ASN (f [1]) and spell the name as 'DOWN' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
	$\blacktriangledown$	TAM [$\blacktriangledown$]	6	1	Down	Scroll down for menus and browser screens or single step through program steps (Info : To assign $\blacktriangledown$ to a key or button, use ASN (f [1]) and spell the name as 'DOWN' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
	EXIT	[EXIT]	8	1	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (f [1]) and spell the name as 'EXIT' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
	EXIT	alpha [EXIT]	8	1	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (f [1]) and spell the name as 'EXIT' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
	EXIT	TAM [EXIT]	8	1	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (f [1]) and spell the name as 'EXIT' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
	EXIT	#TAM [EXIT]	8	1	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (f [1]) and spell the name as 'EXIT' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command		
Number bases	OCT	#TAM [E]	4	4	Octal	Convert X to octal and toggle octal mode ; entering digits A-F switches the calculator to hexadecimal mode ; when KEY _{A-F} is SET, the respective digit is included in the row 2 key's longpress preview cycle (Shortcut : #TAM [E] (0) ; Info : values are displayed with subscript ₈)	Setting (pgm)	OCT	OFF
	DEC	#TAM [LOG]	2	4	Decimal (short integer)	Convert X to decimal (short integer) and toggle decimal (short integer) mode ; entering digits A-F switches the calculator to hexadecimal mode ; when KEY _{A-F} is SET, the respective digit is included in the row 2 key's longpress preview cycle (Shortcut : #TAM [LOG] (D) ; Info : values are displayed with subscript ₁₀)	Setting (pgm)	DEC	OFF
	DEC	#TAM [ENTER]	4	1	Decimal (short integer)	Convert X to decimal (short integer) and toggle decimal (short integer) mode ; entering digits A-F switches the calculator to hexadecimal mode ; when KEY _{A-F} is SET, the respective digit is included in the row 2 key's longpress preview cycle (Shortcut : #TAM [ENTER] ; Info : values are displayed with subscript ₁₀)	Setting (pgm)	DEC	OFF
	#	g [1/x]	2	2	Number base	Set number base ; operates on all stack registers depending on BASE _{HP} (TAM : $\rightarrow$ INT __ TamNonReg menu ; #TAM shortcuts : B = BIN ; D = DEC ; ENTER = DEC ; H = HEX ; 0 = OCT ; Info : SBI is shown if flag SBfrac is SET ; exit base mode by .d, $\rightarrow$ I, [.] or CLRMOD (longerpress [EXIT]))	Setting (pgm, stack)	$\rightarrow$ INT	OFF
	[BASE]	f [4]	6	2	Number base	Number base operations (Short integer (8.02-8.16)) (Split screen : Displaying value of X according to setting dSI (short integer split screen lines) : 0 : <none> ; 1 : HEX ; 2 : HEX/DEC ; 3 : HEX/BIN/DEC ; if flag BCD is SET, instead of HEX, BCD is displayed with subscript digits and followed by subscript _{bcd} ; Info : on BASE page 2, special indicators are used : $\diamond$: all group settings comply, $\diamond$: $\geq$ 1 group settings differ)	MENU	BASE	
	BIN	#TAM [1/x]	2	2	Binary	Convert X to binary and toggle binary mode ; entering digits A-F switches the calculator to hexadecimal mode ; when KEY _{A-F} is SET, the respective digit is included in the row 2 key's longpress preview cycle (Shortcut : #TAM [1/x] (B) ; Info : values are displayed with subscript ₂)	Setting (pgm)	BIN	OFF

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
	HEX	#TAM [RCL]	3	2	Hexadecimal	Convert X to hexadecimal and toggle hexadecimal mode ; if KEY _{A-F} is SET, digits A-F can be entered by pressing row 2 keys (Shortcut : #TAM [RCL] (H) ; Info : values are displayed with subscript ₁₆)	Setting (pgm)	HEX	OFF
Number bases and characters	#	alpha f[.]	8	3	Number sign	Number sign, used for Short integer (8.02-8.16) base (Shortcut : alpha f[.] ; Fontcode : 0023 ₁₆)	Character		
Numeric input	.	[.]	8	3	Radix	Enter radix (default ".") (Info : Second press enters fraction mode ; set default symbol in menu RADIX from menu [DISP.1] gF2)	Symbol		
	+/-	[+/-]	4	3	Change sign	Change sign of number or time value in X (Info : CHS does not copy input to LASTx ; 0. CHS returns -0. provided flag SPCRES is SET)	Function (monadic)	CHS	
	0	[0]	8	2	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Digit		
	0	alpha g[0]	8	2	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Character		
	0	TAM [0]	8	2	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Digit		
	0	#TAM [0]	8	2	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Digit		
	1	[1]	7	2	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Digit		
	1	alpha g[1]	7	2	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Character		
	1	TAM [1]	7	2	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Digit		
	1	#TAM [1]	7	2	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Digit		
	2	[2]	7	3	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Digit		
	2	alpha g[2]	7	3	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Character		
	2	TAM [2]	7	3	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Digit		
	2	#TAM [2]	7	3	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Digit		
	3	[3]	7	4	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Digit		
	3	alpha g[3]	7	4	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Character		
	3	TAM [3]	7	4	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Digit		
	3	#TAM [3]	7	4	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Digit		
	4	[4]	6	2	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Digit		
	4	alpha g[4]	6	2	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Character		
	4	TAM [4]	6	2	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Digit		
	4	#TAM [4]	6	2	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Digit		
	5	[5]	6	3	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Digit		
	5	alpha g[5]	6	3	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Character		
	5	TAM [5]	6	3	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Digit		
	5	#TAM [5]	6	3	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Digit		
	6	[6]	6	4	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Digit		
	6	alpha g[6]	6	4	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Character		
	6	TAM [6]	6	4	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Digit		
	6	#TAM [6]	6	4	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Digit		
	7	[7]	5	2	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Digit		
	7	alpha g[7]	5	2	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Character		
	7	TAM [7]	5	2	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Digit		
	7	#TAM [7]	5	2	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Digit		
	8	[8]	5	3	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Digit		
	8	alpha g[8]	5	3	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Character		
	8	TAM [8]	5	3	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Digit		
	8	#TAM [8]	5	3	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Digit		
	9	[9]	5	4	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Digit		
	9	alpha g[9]	5	4	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Character		
	9	TAM [9]	5	4	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Digit		
	9	#TAM [9]	5	4	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Digit		
	E	[E]	4	4	Enter exponent	Enter exponent (decimal input, powers of 10)	Command		
Numeric input and characters	A	alpha [Σ+]	2	1	A	Character A (Fontcode : 0041 ₁₆)	Character		
	B	alpha [1/x]	2	2	B	Character B (Fontcode : 0042 ₁₆)	Character		
	C	alpha [√x]	2	3	C	Character C (Fontcode : 0043 ₁₆)	Character		
	D	alpha [LOG]	2	4	D	Character D (Fontcode : 0044 ₁₆)	Character		
	E	alpha [LN]	2	5	E	Character E (Fontcode : 0045 ₁₆)	Character		
	F	alpha [XEQ]	2	6	F	Character F (Fontcode : 0046 ₁₆)	Character		

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
Plotting and summation	[PLOT]	g [÷]	5	5	Plotting	Plotting and summation functions (Info : When SDIGS is set to the maximum value of 34, plotting uses 15 instead, otherwise it uses the value set by SDIGS)	MENU	PLOT	
Printing	[PRINT]	f [-]	7	5	Printing	Printing functions (Info : Infrared printing is in development for new models and simulator, but is currently not available on DM42 hardware ; Ref : https://47calc.com/doc/Application%20Notes/AN0021_C47_R47_DL_Printing.pdf)	MENU	PRINT	
Probability	[PROB]	f [x]	6	5	Probability	Probability functions	MENU	PROB	
Programming	≡Δ	f [▲]	5	1	Backstep	Backstep (Shortcut : [▲])	Command (nonpgm)	BST	
	≡▼	f [▼]	6	1	Single step	Single step (Shortcut : [▼])	Command (nonpgm)	SST	
	[FLAG]	f [6]	6	4	Flags	Setting, clearing and testing flags	MENU	FLAG	
	GT0	g [XEQ]	2	6	Go to	Go to global or local label ; GT0. to go to (local) label or step ; GT0.. to move the program pointer to the end of program memory ; GT0↑ to go to the start of the (previous) program or jump to the start of program memory ; GT0+ to go to the next program or jump to the end of program memory (TAM : GT0 __ TamLabel menu ; Info : GT0 + TAM [XEQ] to enter global GT0 '_. TamAlpha menu ; GT0 + button : on [TamLabel.1]F3 to enter GT0 : __ TamLocalLabel menu for easy access to local labels a-l, D-F or local named labels (additionally pressing button α on [TamLocalLabel.1]F3 or TAM [XEQ] to enter GT0 :_. TamAlpha menu))	Command (PEM)	GT0	
	LBL	g [LN]	2	5	Label	Create global or local label ; create global label by pressing key α (f [XEQ]) and entering the name, which will be displayed as '<label>' ; local labels only exist within the scope of the program ; they are numeric : 01-99, single letter : a-l or {A}--{E}, F, {G}--{L} ; or created as local named labels, by pressing button : ([TamLabel.1]F3), then button α ([TamLocalLabel.1]F3) or key α (f [XEQ]) and entering the name, which will be displayed as :<label>; ; maximum label length is : 7 characters (TAM : LBL __ TamLabel menu ; Info : LBL + TAM [XEQ] to enter global LBL '_. TamAlpha menu ; LBL + button : on [TamLabel.1]F3 to enter LBL : __ TamLocalLabel menu to create local labels a-l, D-F or local named labels (additionally pressing button α on [TamLocalLabel.1]F3 or TAM [XEQ] to enter LBL :_. TamAlpha menu) ; note that a label may be used multiple times in a program ; local labels are searched forwards from the GT0 or XEQ command, before global labels, which are searched from the start of program memory)	Command (PEM)	LBL	
	[LOOP]	g [3]	7	4	Looping	Looping (programming) functions	MENU	LOOP	
	[P.FN]	f [3]	7	4	Programming functions	User menu to quickly access selected menus and functions for programming ; all buttons are user assignable ('riveted' look) ; initially populated for basic programming options ; reset using PF.N.R (Shortcut : PEM long [EXIT] ; PEM triple [f/g] (because either HOME ⁸ or MyM ⁸ is SET and either HOME ^b or MyMb is SET) ; PEM longer [f/g] (because either HOME ⁸ or MyM ⁸ is SET and either HOME ^b or MyMb is SET))	MENU	P.FN	
	PRGM	f [R/S]	8	4	Programming	Enter Program Entry Mode (PEM) and activate menu P.FN (Info : Program Entry Mode starts in UPPERcase)	Command		
	R/S	[R/S]	8	4	Run/Stop	Run/Stop (Program) (Info : In Program Entry Mode, R/S enters STOP)	Command		
	[TEST]	g [R/S]	8	4	Testing	Testing functions	MENU	TEST	
	XEQ	[XEQ]	2	6	Execute	Execute function or program with global or local label (TAM : XEQ __ TamLabel menu ; Info : XEQ + TAM [XEQ] to enter global XEQ '_. TamAlpha menu ; XEQ + button : on [TamLabel.1]F3 to enter XEQ : __ TamLocalLabel menu for easy access to local labels a-l, D-F or local named labels (additionally pressing button α on [TamLocalLabel.1]F3 or TAM [XEQ] to enter XEQ :_. TamAlpha menu))	Command (PEM)	XEQ	
Reals	.d	g [LOG]	2	4	Decimal (Real) or Date	Convert to decimal (Real) or date value ; untag (ADM) angle ; clear Fractions Mode, #BASE Mode ; convert angles / Times / Dates to Real ; convert NIM input to Date (according to CLK date format settings and implied conversion set by YY ; convert Complex number with zero imaginary part to Real ; when editing angles using EDIT, key .d removes the angle tag (Normal Mode and PEM) ; when editing short integers, key .d removes the base (Normal Mode and PEM) ; in PEM, .d registers as →REAL (TI : decimal h: or yyyy.mddd; ; Ref : https://47calc.com/doc/C47/Reference/C47_Date_formats.pdf)	Function (monadic)		
	[REAL]	g [6]	6	4	Real	Functions on Real numbers and Complex numbers	MENU	REAL	
RPN Calculus and plotting	[ADV]	f [8]	5	3	Advanced	Advanced functions, using RPN user programs (Ref : https://47calc.com/doc/Application%20Notes/AN0011_C47_JM_EQN_and_ADV_menu_solver_integrat_or_updated.pdf)	MENU	ADV	
Stack	↵	f [←]	4	5	Undo	Restore complete stack, LASTx, STATS and system flags (Info : Error 128 -- Undo failed: likely no memory -- may be raised)	Command (nonpgm)	UNDO	
	DROPx*	double [←]	4	5	Drop X	Drop X from stack (Shortcut : double [←] (if ←DROP is CLEAR -- default))	Command	DROPx	

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
	ENTER	[ENTER]	4	1	Enter	If eRPN is SET, in Numeric Input Mode, ENTER pushes the input value onto the stack, and if CLEAR, then it also duplicates X to Y ; without input or in Program Entry Mode, ENTER always duplicates X to Y ; only if eRPN is CLEAR, automatic stack lift is disabled after ENTER (Info : Note that In Program Entry Mode, ENTER terminates numeric input without inserting an ENTER instruction (it is not necessary to separate numbers on consecutive program lines and - if eRPN is SET - ENTER would lead to unnecessary duplication of X) ; For assignments (ASN (f[1])), spell the name as 'ENTER' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command	ENTER	
	ENTER	alpha [ENTER]	4	1	Enter	If eRPN is SET, in Numeric Input Mode, ENTER pushes the input value onto the stack, and if CLEAR, then it also duplicates X to Y ; without input or in Program Entry Mode, ENTER always duplicates X to Y ; only if eRPN is CLEAR, automatic stack lift is disabled after ENTER (Info : Note that In Program Entry Mode, ENTER terminates numeric input without inserting an ENTER instruction (it is not necessary to separate numbers on consecutive program lines and - if eRPN is SET - ENTER would lead to unnecessary duplication of X) ; For assignments (ASN (f[1])), spell the name as 'ENTER' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command	ENTER	
	ENTER	TAM [ENTER]	4	1	Enter	If eRPN is SET, in Numeric Input Mode, ENTER pushes the input value onto the stack, and if CLEAR, then it also duplicates X to Y ; without input or in Program Entry Mode, ENTER always duplicates X to Y ; only if eRPN is CLEAR, automatic stack lift is disabled after ENTER (Info : Note that In Program Entry Mode, ENTER terminates numeric input without inserting an ENTER instruction (it is not necessary to separate numbers on consecutive program lines and - if eRPN is SET - ENTER would lead to unnecessary duplication of X) ; For assignments (ASN (f[1])), spell the name as 'ENTER' ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command	ENTER	
	LASTx	f[xzy]	4	2	Last X	Recall last X (Register L)	Command	LASTx	
	R↓	[R↓]	3	3	Roll down	Roll down stack	Command	R↓	
	RCL	[RCL]	3	2	Recall	Recall value from register or variable (TAM : RCL __ TamRcl menu (TamRclTVM when menu TVM is open) ; TI : Rnn : or '<var>' : (or R.nn : or or '<vars>' : ; Info : local registers .00-.nn etc. need to be allocated using LocR nn+1)	Command	RCL	
	[STK]	g[xzy]	4	2	Stack	Stack functions	MENU	STK	
	STO	[STO]	3	1	Store	Store X in global register or variable and create variable if it does not exist ; maximum variable length is : 7 characters (TAM : STO __ TamSto menu (TamStoTVM when menu TVM is open) ; Info : local registers .00-.nn etc. need to be allocated using LocR nn+1 ; TI : Rnn : or '<var>' : (or R.nn : or or '<vars>' : ; Ref : https://47calc.com/doc/C47/Reference/C47_Variable_naming.pdf)	Command	STO	
	xzy	[xzy]	4	2	Swap X and Y	Swap register X and register Y	Command	xzy	
Stack and registers	SHOW	f[.]	8	3	Show	Show item in maximum detail, according to data type (tag) : Long integers up to 10^{123} will be displayed in large numeric font ; up to 10^{416} in the medium standard font and up to 10^{1000} in tiny font ; Real numbers in SIG 6, UNIT 3, SCI 3 ; Complex numbers (RECT and POLAR) in SIG 4 ; Virtual compound data types are shown with all digits in large, medium or tiny font (Info : Key [R/S] changes view for Long integers ; Virtual compound data types (font size, next page) ; use [▲] or [▼] to scroll through all registers (and matrix variables) ; when menu XFCNS is open, if XYZ contains result in Virtual compound data type, SHOW displays X : XY+Z = <value> and ditto for T : TA+B and for the dedicated triple register storage, e.g. R90 : FMA: (fused multiply-add) ; Ref : https://47calc.com/doc/C47/Reference/C47_Datatypes.pdf)	Command	SHOW	
Status	FLGS	g[▼]	6	1	Flag browser	Browse status pages (flags 00-99, lettered flags, status overview, system flags) (Info : Press [EXIT] to exit Flag browser and browse using [▲] and [▼] ; browser STATUS in menu FLAG shows the same status pages in a different order ; Ref : https://47calc.com/doc/C47/Reference/C47_Flags_pl.pdf)	Browser	FLGS	
	REGS	g[▲]	5	1	Register browser	Browse all registers (Shortcut : [.] : Switch register/variable view, [R/S] : Switch contents/storage view, [RCL] : Recall bottom item, [▲], [▼], ABCDEGHIJKLMNOP, 00..99 : Navigate, [EXIT] : Exit Register browser ; Ref : https://47calc.com/doc/C47/Reference/C47_Registers.pdf)	Browser	REGS	
	VIEW	f[0]	8	2	View	View register or variable (with preceding TI) (TAM : VIEW __ Tam menu ; Info : if $\frac{\square}{\square}$ ACT is SET, VIEW will print when executed from the keyboard in MAN, NORM or TRACE ; in Program Entry Mode, $\frac{\square}{\square}$ EN must be SET as well ; if $\frac{\square}{\square}$ ACT is CLEAR and $\frac{\square}{\square}$ EN is SET, VIEW halts execution (STOP))	Command	VIEW	

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
Summary statistics	[STAT]	f[÷]	5	5	Statistics	Statistics functions (Ref : https://47calc.com/doc/C47/Reference/C47_Formulas.pdf)	MENU	STAT	
	Σ+	[Σ+]	2	1	Sigma+	Enter data into the statistics matrix (STATS) ; the [Σ+] key also is the hotkey that can be used for special key assignments in NORMAL mode, using menu Σ+ KEY (TI : nnn data point(s) ; Info : if a nx2 matrix is in X, Σ+ appends the data to the STATS matrix (creating it as necessary) ; Σ+ disables automatic stack lift for the next entry)	Command	Σ+	
System	[MODE]	f[+/-]	4	3	Mode settings	System (mode settings) settings (Info : MODE replaces R47 menu PREF ; Ref : https://47calc.com/doc/Application%20Notes/AN0028_C47_R47_JM_Configurability_Tour.pdf)	MENU	MODE	
	OFF	f[EXIT]	8	1	Off	Turn off calculator (Info : On the simulator, pressing OFF or quitting the application saves the calculator state in : backup.cfg)	Command	OFF	
	OFF	alpha f[EXIT]	8	1	Off	Turn off calculator (Info : On the simulator, pressing OFF or quitting the application saves the calculator state in : backup.cfg)	Command	OFF	
Text functions	[α.FN]	g[2]	7	3	Alpha functions	Alpha (text string) functions	MENU	α.FN	
Text input	↑ (HOME←)	alpha [▲]	5	1	Cursor to begin	Jump to top left of alpha input	Command		
	↑ (α ^{SUP})	alpha g[▲]	5	1	Superscript	Superscript (Shortcut : alpha g[▲])	Alpha-shift		
	↓ (END→)	alpha [▼]	6	1	Cursor to end	Jump to bottom right of alpha input	Command		
	↓ (α _{SUB})	alpha g[▼]	6	1	Subscript	Subscript (Shortcut : alpha g[▼])	Alpha-shift		
	<f>lipchar	alpha f[f/g]	7	1	Flip case (one character)	Set next alpha entry to flip lower/UPPER case (one character) (Shortcut : alpha f + <char>)	Alpha-shift (special)		
	ASN	f[1]	7	2	Assign	Assign function, menu or character to a keyboard key or to a button in a menu ; for options including creating user defined menus, see reference page (TAM : ASSIGN α (f[XEQ]) activates "ASSIGN 'α. TamAlpha menu α" and allows a function or command to be spelled, to assign it to a key or button ; Info : "ASSIGN α" indicates that a key or button can be pressed to assign it to another button or key ; use button ASN ([ALPHA.1]fF4) for character assignments in Alpha Input Mode ; this button is not shown in Program Entry Mode ; Ref : https://47calc.com/doc/C47/Reference/C47_Assignment.pdf)	Command	ASSIGN	
	CASE DN	alpha f[▼]	6	1	Alpha lock downwards	Move down alpha lock from N to A to a (Shortcut : alpha f[▼] ; Info : sets initial case of menu A...Ω/α...ω and αINTL/aintl)	Alpha-shift		
	CASE UP	alpha f[▲]	5	1	Alpha lock upwards	Move up alpha lock from A to a to N (Shortcut : alpha f[▲] ; Info : sets initial case of menu A...Ω/α...ω and αINTL/aintl)	Alpha-shift		
	CLA	alpha f[←]	4	5	Clear alpha	In Alpha Input Mode, clear alpha input buffer ; in Equation Input Mode, clear equation (alpha) input buffer (Shortcut : alpha f[←] ; alpha g[←] ; alpha long [←] ; EIM long [←])	Command		
	CLA	alpha g[←]	4	5	Clear alpha	In Alpha Input Mode, clear alpha input buffer ; in Equation Input Mode, clear equation (alpha) input buffer (Shortcut : alpha f[←] ; alpha g[←] ; alpha long [←] ; EIM long [←])	Command		
	di<g>it	alpha g[f/g]	7	1	Set numeric (one digit)	Set next alpha entry to numeric (one digit) or other alpha g-shifted character (Shortcut : alpha g + <char>)	Alpha-shift (special)		
	X.EDIT	alpha f[ENTER]	4	1	Edit X	Edit contents of stack register X as text (Shortcut : alpha long [ENTER] ; EIM long [ENTER])	Command	X.EDIT	
	[α]	f[XEQ]	2	6	Alpha input	Open alpha menu to enter, edit and clear alpha input ; when TAM is active, open menu TamAlpha (Shortcut : longpress [XEQ] (even when M.14 is ON) ; Info : Alpha Input Mode is opened in UPPERCASE ; menu CAT [ALPHA] is available on keyboard alpha f[+] ; alpha g-shift characters can also be reached from alpha longpress keyboard)	MENU (item)	ALPHA	
Time functions	[CLK]	g[5]	6	3	Clock	Clock functions, including setting date and time and julian day numbers (astronomy) (Info : Use TDISP to set time display format : 0 = full ; 1,2 = hours/minutes ; 3 = hours/minutes/seconds ; 4,5,6 = 1,2,3 decimal places for the seconds ; Ref : https://47calc.com/doc/C47/Reference/C47_Date_formats.pdf)	MENU	CLK	
	STOPW	g[0]	8	2	Stopwatch	Stopwatch with running time, counter and countdown (playing BEEP after running down)	App	STOPW	
Time/angle conversions	.ms	g[√x]	2	3	Minutes & seconds	Convert sexagesimal format input sequence or decimal stack value to hh:mm:ss hours or dd°mm'ss" degrees (cyclic) (Info : NIM input treated as sexagesimal (hh/dd.mmss) format ; stack input treated as decimal value)	Function (monadic, cyclic)	.ms	
Trailing input	{A}	TAM [Σ+]	2	1	Register A	Easy access to Register A (104) : Stack level 5 (Shortcut : STO/RCL {A} ; TI : A:)	EasyAccess (TAM)		
	{B}	TAM [1/x]	2	2	Register B	Easy access to Register B (105) : Stack level 6 (Shortcut : STO/RCL {B} ; TI : B:)	EasyAccess (TAM)		
	{C}	TAM [√x]	2	3	Register C	Easy access to Register C (106) : Stack level 7 (Shortcut : STO/RCL {C} ; TI : C:)	EasyAccess (TAM)		
	{D}	TAM [LOG]	2	4	Register D	Easy access to Register D (107) : Stack level 8 (Shortcut : STO/RCL {D} ; TI : D:)	EasyAccess (TAM)		
	{E}	TAM [LN]	2	5	Register E	Easy access to Register E (217) : General purpose register E (Shortcut : STO/RCL {E} ; TI : E:)	EasyAccess (TAM)		
	{G}	TAM [STO]	3	1	Register G	Easy access to Register G (219) : General purpose register G ; also used to store third to last long integer prime factor for FACTORS (Shortcut : STO/RCL {G} ; TI : G:)	EasyAccess (TAM)		
	{H}	TAM [RCL]	3	2	Register H	Easy access to Register H (220) : General purpose register H ; also used to store second to last long integer prime factor for FACTORS (Shortcut : STO/RCL {H} ; TI : H:)	EasyAccess (TAM)		

Category	Layoutlabel	Key	Row	Column	Fullname	Extended description	Type	Catalog	Default
	{I}	TAM [R+]	3	3	Register I	Easy access to Register I (109) : General purpose register I ; also used to store current row of indexed matrix (Shortcut : ST0/RCL {I} ; TI : I: or M[I,Jc]=<name> [<row> <col>] (if indexed matrix exists))	EasyAccess (TAM)		
	{J}	TAM [SIN]	3	4	Register J	Easy access to Register J (110) : General purpose register J ; also used to store current column of indexed matrix (Shortcut : ST0/RCL {J} ; TI : J: or M[I,Jc]=<name> [<row> <col>] (if indexed matrix exists))	EasyAccess (TAM)		
	{K}	TAM [COS]	3	5	Register K	Easy access to Register K (111) : General purpose register K ; also used in Var-MNU to store variable name when MVAR-defined button (<var...>) is pressed without NIM input ; also used to store last long integer prime factor for FACTORS or the remaining number to be factorised ; also used as the default alpha register for commands compatible with the HP-42S/DM42(n) calculator (Shortcut : ST0/RCL {K} ; TI : K:)	EasyAccess (TAM)		
	{L}	TAM [TAN]	3	6	Register L	Easy access to Register L (108) : Last X (Shortcut : ST0/RCL {L} ; TI : L:)	EasyAccess (TAM)		
	{M}	TAM [x2y]	4	2	Register M	Easy access to Register M (211) : General purpose register M ; also used to store distribution parameter : mean, median, location, degree of freedom 1, centre, lower limit (Shortcut : ST0/RCL {M} ; TI : M:)	EasyAccess (TAM)		
	{N}	TAM [+/-]	4	3	Register N	Easy access to Register N (212) : General purpose register N ; also used to store distribution parameter : degree of freedom 2, quantity, upper limit (Shortcut : ST0/RCL {N} ; TI : N:)	EasyAccess (TAM)		
	{O}	TAM [E]	4	4	Register O	Easy access to Register O (221) : General purpose register O (Shortcut : ST0/RCL {O} ; TI : O:)	EasyAccess (TAM)		
	[TamAlpha]	TAM [XEQ]	2	6	TAM mode (alpha)	Transient Alpha Mode is activated for trailing input (alpha) (Shortcut : Activated from TAM menus by α (f[XEQ]) or TAM [XEQ] ; Info : Alpha Input Mode is opened in UPPERCASE for labels, lowercase for variables ; menu CAT [ALPHA] is available on keyboard alpha f[+] ; alpha g-shift characters can also be reached from alpha longpress keyboard)	MENU (TAM)		
	[TamAlpha*]	double [XEQ]	2	6	TAM mode (alpha)	Transient Alpha Mode is activated for trailing input (alpha) (Shortcut : Activated from TAM menus by α (f[XEQ]) or TAM [XEQ] ; Info : Alpha Input Mode is opened in UPPERCASE for labels, lowercase for variables ; menu CAT [ALPHA] is available on keyboard alpha f[+] ; alpha g-shift characters can also be reached from alpha longpress keyboard)	MENU (TAM)		
Trigonometry	ACOS	f[COS]	3	5	Arc cosine	Inverse cosine (Info : Returns the principal value of the inverse cosine of X ; if flag CPXRES is SET, the domain is extended beyond [-1, +1] and complex results may be returned)	Function (monadic)	ARCCOS	
	ASIN	f[SIN]	3	4	Arc sine	Inverse sine (Info : Returns the principal value of the inverse sine of X ; if flag CPXRES is SET, the domain is extended beyond [-1, +1] and complex results may be returned)	Function (monadic)	ARCSIN	
	ATAN	f[TAN]	3	6	Arc tangent	Inverse tangent (Info : Returns the principal value of the inverse tangent of X ; if flag SPCRES is SET, infinity input is allowed and the range is extended to [-90°, 90°] (inclusive))	Function (monadic)	ARCTAN	
	COS	[COS]	3	5	Cosine	Cosine	Function (monadic)	COS	
	SIN	[SIN]	3	4	Sine	Sine	Function (monadic)	SIN	
	TAN	[TAN]	3	6	Tangent	Tangent	Function (monadic)	TAN	
	[TRG]	g[+/-]	4	3	Trigonometry	Trigonometry functions (Info : TRG replaces R47 menu TRG_R47 ; Ref : https://47calc.com/doc/C47/Reference/C47_DMS-HMS.pdf)	MENU	TRG	
Trigonometry and characters	COS	alpha g[COS]	3	5	Cosine (string)	Cosine (Shortcut : alpha g[COS] ("COS"))	Character		
	SIN	alpha g[SIN]	3	4	Sine (string)	Sine (Shortcut : alpha g[SIN] ("SIN"))	Character		
	TAN	alpha g[TAN]	3	6	Tangent (string)	Tangent (Shortcut : alpha g[TAN] ("TAN"))	Character		
Unit conversions	[CONV]	f[5]	6	3	Unit conversions	Unit conversions (Info : Flag CONV _{HP} may be SET for <to> $\leftrightarrow$ <to> unit conversion buttons ; CLEAR for <from> $\rightarrow$ <from> unit conversion buttons (default SET) ; Ref : https://47calc.com/doc/Application%20Notes/AN0024_C47_R47_JM_Assigning_custom_conversion_pairs.pdf)	MENU	CONV	