

R47v0 Keyboard listing per layer

Layer	Row	Column	Key	Layoutlabel	Fullname	Extended description	Type	Catalog	Default	Category
unshifted	1	1	[0]	F1	Function key 1 :	Function key 1 : unshifted keyboard	F-key			Function key
		2	[0]	F2	Function key 2 :	Function key 2 : unshifted keyboard	F-key			Function key
		3	[0]	F3	Function key 3 :	Function key 3 : unshifted keyboard	F-key			Function key
		4	[0]	F4	Function key 4 :	Function key 4 : unshifted keyboard	F-key			Function key
		5	[0]	F5	Function key 5 :	Function key 5 : unshifted keyboard	F-key			Function key
		6	[0]	F6	Function key 6 :	Function key 6 : unshifted keyboard	F-key			Function key
	2	1	[x ²]	x ²	Square	Square of X	Function (monadic)	x ²		Mathematics
		2	[√x]	√x	Square root	Square root of X (Info : When X is a matrix √x calculates its square root (MSQRT))	Function (monadic)	√x		Mathematics
		3	[1/x]	1/x	Reciprocal	Reciprocal (1/X) (Info : When X is a matrix 1/x inverts it ([M] ⁻¹))	Function (monadic)	1/x		Mathematics
		4	[y ^x]	y ^x	y to the power x	Raise value in the Y-register to the power in the X-register	Function (dyadic)	y ^x		Mathematics
		5	[LOG]	LOG	Common logarithm	Common logarithm (base 10)	Function (monadic)	LOG		Mathematics
		6	[LN]	LN	Natural logarithm	Natural logarithm (base e)	Function (monadic)	LN		Mathematics
	3	1	[ST0]	ST0	Store	Store X in global register or variable and create variable if it does not exist ; maximum variable length is : 7 characters (TAM : ST0 __ TamSto menu (TamStoTVM when menu TVM is	Command	ST0		Stack
		2	[RCL]	RCL	Recall	Recall value from register or variable (TAM : RCL __ TamRcl menu (TamRclTVM when menu TVM is	Command	RCL		Stack
		3	[R↓]	R↓	Roll down	Roll down stack	Command	R↓		Stack
		4	[DRG]	DRG	Degrees-radians-gradians	Add ADM tag to untagged value in X, convert tagged value to degrees-radians-gradians (cyclic)	Function (monadic, cyclic,	DRG		Angle
		5	[<f>]	<f>	Shift f	Shift f (yellow) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the	f-shift	f		Keyboard
		6	[<g>]	<g>	Shift g	Shift g (blue) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the <g>	g-shift	g		Keyboard
	4	1	[ENTER]	ENTER	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	Command	ENTER		Stack
		2	[x↔y]	x↔y	Swap X and Y	Swap register X and register Y	Command	x↔y		Stack
		3	[CHS]	CHS	Change sign	Change sign of number or time value in X (Info : CHS does not copy input to LASTx ; 0. CHS	Function (monadic)	CHS		Numeric input
		4	[EEX]	EEX	Enter exponent	Enter exponent (decimal input, powers of 10)	Command			Numeric input
		5	[←]	←	Backspace	Backspace : clear input when in Numeric Input Mode ; when not in NIM, executes DROPx ; CLX	Command (nonpgm)	BACK		Cleanup
	5	1	[XEQ]	XEQ	Execute	Execute function or program with global or local label (TAM : XEQ __ TamLabel menu ; Info : XEQ	Command (PEM)	XEQ		Programming
		2	[7]	7	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Digit			Numeric input
		3	[8]	8	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Digit			Numeric input
		4	[9]	9	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Digit			Numeric input
		5	[÷]	÷	Divide	Divide Y by X	Function (dyadic)	÷		Mathematics
	6	1	[↑]	↑	Up	Scroll up for menus and browser screens or backstep through program steps (Info : To assign	Command			Navigation
		2	[4]	4	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Digit			Numeric input
		3	[5]	5	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Digit			Numeric input
		4	[6]	6	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Digit			Numeric input
		5	[x]	x	Multiply	Multiply Y by X	Function (dyadic)	x		Mathematics
	7	1	[↓]	↓	Down	Scroll down for menus and browser screens or single step through program steps (Info : To	Command			Navigation
		2	[1]	1	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Digit			Numeric input
		3	[2]	2	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Digit			Numeric input
		4	[3]	3	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Digit			Numeric input
		5	[−]	−	Subtract	Subtract X from Y	Function (dyadic)	−		Mathematics
	8	1	[EXIT]	EXIT	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (g[DRG]) and spell the name as 'EXIT' ;	Command			Navigation
		2	[0]	0	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Digit			Numeric input
		3	[.]	.	Radix	Enter radix (default ".") (Info : Second press enters fraction mode ; set default symbol in	Symbol			Numeric input
		4	[R/S]	R/S	Run/Stop	Run/Stop (Program) (Info : In Program Entry Mode, R/S enters STOP)	Command			Programming
		5	[+]	+	Add	Add X to Y ; concatenate X and Y, including numbers, dates and times + strings and vice versa	Function (dyadic)	+		Mathematics and text functions
f-shift	2	1	f[x ²]	i	Complex number (rectangular	Enter complex number (rectangular notation) whether RECT is set or not ; e.g. a i b ENTER	Command	op_i		Complex
		2	f[√x]	i_@	Complex number (polar	Enter complex number (polar notation) whether POLAR is set or not ; e.g. a i_@ b ENTER results	Command	op_i_@		Complex
		3	f[1/x]	x!	Factorial x! or Γ(x+1)	For Long integers : x! ; for Reals : Γ(x+1) (Info : Max integer: 450 (up to 1000 digits accurate)	Function (monadic)	x!		Mathematics
		4	f[y ^x]	√[y]	xth root	Xth root of Y	Function (dyadic)	√[y]		Mathematics
		5	f[LOG]	10 ^x	10 to the power x	Raise 10 to the power in the X-register	Function (monadic)	10 ^x		Mathematics
		6	f[LN]	e ^x	e to the power x	Raise e to the power in the X-register	Function (monadic)	e ^x		Mathematics

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	3	1	f[ST0]	x	Magnitude	Magnitude (absolute value) of Complex number	Function (monadic)	x		Complex numbers
		2	f[RCL]	%	Percent	X Percent of Y, keeping Y on stack -- see Formula_PC.png :	Function (dyadic)	%		Financial
		3	f[R+]	π	pi	Enter value of pi on the stack	Command			Constants
		4	f[DRG]	USER	USER mode	Switch on xxx ; not programmable - in PEM, use flag USER (Info : To assign USER to a key or	Setting		OFF	Customisation
	4	1	f[ENTER]	COMPLEX	Complex number	Convert to or from Complex number (2.0-2.5)	Function (dyadic)	COMPLEX		Complex
		2	f[x↔y]	LASTx	Last X	Recall last X (Register L)	Command	LASTx		Stack
		3	f[CHS]	[DISP]	Display settings	Display settings (Info : On DISP page 3, special indicators are used : ♦ : all group settings comply, ◇ : ≥1 group settings differ ; Ref :	MENU	DISP		Display
		4	f[EEX]	[PFX]	Prefixes (UNIT)	Prefixes for UNIT mode	MENU	Prefix		Numeric input
		5	f[↵]	↵	Undo	Restore complete stack, LASTx, STATS and system flags (Info : Error 128 -- Undo failed: likely	Command (nonpgm)	UNDO		Stack
	5	1	f[XEQ]	[α]	Alpha input	Open alpha menu to enter, edit and clear alpha input ; when TAM is active, open menu TamAlpha	MENU (item)	ALPHA		Text input
		2	f[7]	SIN	Sine	Sine	Function (monadic)	SIN		Trigonometry
		3	f[8]	COS	Cosine	Cosine	Function (monadic)	COS		Trigonometry
		4	f[9]	TAN	Tangent	Tangent	Function (monadic)	TAN		Trigonometry
		5	f[÷]	[STAT]	Statistics	Statistics functions (Ref : https://47calc.com/doc/R47/Reference/R47v0_Formulas.pdf)	MENU	STAT		Summary statistics
	6	1	f[↑]	≡↑	Backstep	Backstep (Shortcut : [↑])	Command (nonpgm)	BST		Programming
		2	f[4]	[BASE]	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 ;	MENU	BASE		Number bases
		3	f[5]	[INTS]	Integers	Short integer functions	MENU	INTS		Integers
		4	f[6]	[MATX]	Matrix	Matrix functions ; a matrix is displayed in X and shown in other stack registers as [m×n Matrix] or [m×n ∈ Matrix] when containing complex element(s) (Ref :	MENU	MATX		Matrix operations
		5	f[x]	[EQN]	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	MENU	EQN		Equations
	7	1	f[↓]	≡↓	Single step	Single step (Shortcut : [↓])	Command (nonpgm)	SST		Programming
		2	f[1]	[PREF]	Preferences	System preferences ; replaces MODE (Info : PREF replaces C47 menu MODE ; Ref :	MENU	PREF		System
		3	f[2]	[CONV]	Unit conversions	Unit conversions (Info : Flag CONV _{HP} may be SET for <to> ←> <to> unit conversion buttons ; CLEAR for <from> →← <from> unit conversion buttons (default SET) ; Ref :	MENU	CONV		Unit conversions
		4	f[3]	[FLAG]	Flags	Setting, clearing and testing flags	MENU	FLAG		Programming
		5	f[-]	[PROB]	Probability	Probability functions	MENU	PROB		Probability
	8	1	f[EXIT]	⏻	Off	Turn off calculator (Info : On the simulator, pressing OFF or quitting the application saves the	Command	OFF		System
		2	f[0]	VIEW	View	View register or variable (with preceding TI) (TAM : VIEW __ Tam menu ; Info : if ≡ACT is SET,	Command	VIEW		Status
		3	f[.]	SHOW	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 10 ¹¹⁶ in the medium standard font and up to 10 ¹⁰⁰⁰ in	Command	SHOW		Stack and registers
		4	f[R/S]	PRGM	Programming	Enter Program Entry Mode (PEM) and activate menu P.FN (Info : Program Entry Mode starts in UPPERcase)	Command			Programming
		5	f[+]	[CAT]	Catalog	Catalog of all items (functions, characters, programs, variables, menus) (Info : Press [EXIT] to	MENU	CATALOG		Catalog
g-shift	2	1	g[x ²]	→R	To rectangular	Transform polar to rectangular coordinates (dyadic, stack conventions according to flag RP _{HP}	Function (monadic, dyadic)	→RECT		Complex and
		2	g[√x]	→P	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	Function (monadic, dyadic)	→POLAR		Complex and coordinates
		3	g[1/x]	.ms	Minutes & seconds	Convert sexagesimal format input sequence or decimal stack value to hh:mm:ss hours or	Function (monadic, cyclic)	.ms		Time/angle
		4	g[y ^x]	.d	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	Function (monadic)			Reals
		5	g[LOG]	→I	To integer	Convert to Long integer (0), Short integer (8.02-8.16) (cyclic, max 1000 digits) (Info : Short	Function (monadic, cyclic)	→I		Integers
		6	g[LN]	#	Number base	Set number base ; operates on all stack registers depending on BASE _{HP} (TAM : →INT __ TamNonReg menu ; #TAM shortcuts : B = BIN ; D = DEC ; ENTER = DEC ; H = HEX ; Info : SBI is shown if flag SBfrac is SET ; exit base mode by .d, →I, [.] or CLRMOD (longerpress [EXIT]))	Setting (pgm, stack)	→INT	OFF	Number bases
	3	1	g[ST0]	∠	Argument (angle)	Argument (angle) of Complex number	Function (monadic)	∠		Complex numbers
		2	g[RCL]	Δ%	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 : Δ% :)	Function (dyadic)	Δ%		Financial
		3	g[R+]	R↑	Roll up	Roll up stack	Command	R↑		Stack
		4	g[DRG]	ASN	Assign	Assign function, menu or character to a keyboard key or to a button in a menu ; for options	Command	ASSIGN		Text input

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	4	1	g[ENTER]	[CPX]	Complex functions	Complex functions (Ref : https://47calc.com/doc/Application%20Notes/AN0001_C47_R47_JM_Complex_number_engineering_exampl)	MENU	CPX		Complex numbers
		2	g[xzy]	[STK]	Stack	Stack functions	MENU	STK		Stack
		3	g[CHS]	[TRG]	Trigonometry	Trigonometry functions (Info : TRG_R47 replaces C47 menu TRG ; Ref : https://47calc.com/doc/R47/Reference/R47v0_DMS-HMS.pdf)	MENU	TRG_R47		Trigonometry
		4	g[EEX]	[EXP]	Exponential	Exponential functions	MENU	EXP		Mathematics
		5	g[+]	[CLR]	Clear	Clear flags, programs, registers, stacks, variables and reset calculator	MENU	CLR		Cleanup
	5	1	g[XEQ]	GTO	Go to	Go to global or local label ; GTO. to go to (local) label or step ; GTO.. to move the program	Command (PEM)	GTO		Programming
		2	g[7]	ASIN	Arc sine	Inverse sine (Info : Returns the principal value of the inverse sine of X ; if flag CPXRES is	Function (monadic)	ARCSIN		Trigonometry
		3	g[8]	ACOS	Arc cosine	Inverse cosine (Info : Returns the principal value of the inverse cosine of X ; if flag CPXRES is	Function (monadic)	ARCCOS		Trigonometry
		4	g[9]	ATAN	Arc tangent	Inverse tangent (Info : Returns the principal value of the inverse tangent of X ; if flag SPCRES	Function (monadic)	ARCTAN		Trigonometry
		5	g[÷]	[PLOT]	Plotting	Plotting and summation functions (Info : When SDIGS is set to the maximum value of 34, plotting	MENU	PLOT		Plotting and
	6	1	g[↑]	REGS	Register browser	Browse all registers (Shortcut : [.] : Switch register/variable view, [R/S] : Switch	Browser	REGS		Status
		2	g[4]	[BITS]	Bitwise functions	Bitwise functions	MENU	BITS		Bits and bytes
		3	g[5]	[REAL]	Real	Functions on Real numbers and Complex numbers	MENU	REAL		Reals
		4	g[6]	[X.FN]	Extended functions	Extended functions (Bessel, Bernoulli, Gamma, Elliptical, Orthogonal, etcetera) (Ref :	MENU	X.FN		Mathematics
		5	g[x]	[ADV]	Advanced	Advanced functions, using RPN user programs (Ref :	MENU	ADV		RPN Calculus
	7	1	g[↓]	FLGS	Flag browser	Browse status pages (flags 00-99, lettered flags, status overview, system flags) (Info : Press	Browser	FLGS		Status
		2	g[1]	[KEYS]	Keys	Layouts, ribbons and special key assignments (Ref :	MENU	KEYS		Customisation
		3	g[2]	[CLK]	Clock	Clock functions, including setting date and time and julian day numbers (astronomy) (Info : Use	MENU	CLK		Time functions
		4	g[3]	[α.FN]	Alpha functions	Alpha (text string) functions	MENU	α.FN		Text functions
		5	g[-]	[FIN]	Financial	Financial calculations including time value of money (TVM) and TVM cash flow (Ref :	MENU	FIN		Financial
	8	1	g[EXIT]	[INFO]	Information	System information and some information about the value in the X-register	MENU	INFO		Information
		2	g[0]	[I/O]	Input/Output	I/O functions (read/load, write/save, export program, in-export registers, SNAP, audio, print)	MENU	I/O		Input-Output
		3	g[.]	a ^{b/c}	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	Setting (cyclic, pgm, stack)		OFF	Fractions
		4	g[R/S]	[P.FN]	Programming functions	User menu to quickly access selected menus and functions for programming ; all buttons are	MENU	P.FN		Programming
		5	g[+]	[CNST]	Constants	Important scientific and technical constants (Info : In Program Entry Mode, constants selected	MENU (ASM)	CNST		Catalog
doublepress	4	5	double [+]	DROPx*	Drop X	Drop X from stack (Shortcut : double [+]) (if ←DROP is CLEAR -- default))	Command	DROPx		Stack
	5	1	double [XEQ]	[TamAlpha*]	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,	MENU (TAM)			Trailing input
alpha	2	1	alpha [x²]	A	A	Character A (Fontcode : 0041 ₁₆)	Character			Numeric input and characters
		2	alpha [√x]	B	B	Character B (Fontcode : 0042 ₁₆)	Character			Numeric input
		3	alpha [1/x]	C	C	Character C (Fontcode : 0043 ₁₆)	Character			Numeric input and characters
		4	alpha [y*]	D	D	Character D (Fontcode : 0044 ₁₆)	Character			Numeric input
		5	alpha [LOG]	E	E	Character E (Fontcode : 0045 ₁₆)	Character			Numeric input and characters
		6	alpha [LN]	F	F	Character F (Fontcode : 0046 ₁₆)	Character			Numeric input and characters
	3	1	alpha [STO]	G	G	Character G (Fontcode : 0047 ₁₆)	Character			Characters
		2	alpha [RCL]	H	H	Character H (Fontcode : 0048 ₁₆)	Character			Characters
		3	alpha [R↓]	I	I	Character I (Fontcode : 0049 ₁₆)	Character			Characters
		4	alpha [DRG]	J	J	Character J (Fontcode : 004A ₁₆)	Character			Characters
		5	alpha [<f>]	<f>	Shift f	Shift f (yellow) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the	f-shift	f		Keyboard
		6	alpha [<g>]	<g>	Shift g	Shift g (blue) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the <g>	g-shift	g		Keyboard
	4	1	alpha [ENTER]	ENTER	Enter	If eRPN is SET, in Numeric Input Mode, ENTER pushes the input value onto the stack, and if	Command	ENTER		Stack
		2	alpha [xzy]	K	K	Character K (Fontcode : 004B ₁₆)	Character			Characters
		3	alpha [CHS]	L	L	Character L (Fontcode : 004C ₁₆)	Character			Characters
		4	alpha [EEX]	M	M	Character M (Fontcode : 004D ₁₆)	Character			Characters

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		5	alpha [+]	←	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	Command (nonpgm)	BACK		Cleanup
	5	1	alpha [XEQ]	_	Underscore	Character _ (Fontcode : 005F ₁₆)	Character			Characters
		2	alpha [7]	N	N	Character N (Fontcode : 004E ₁₆)	Character			Characters
		3	alpha [8]	0	0	Character 0 (Fontcode : 004F ₁₆)	Character			Characters
		4	alpha [9]	P	P	Character P (Fontcode : 0050 ₁₆)	Character			Characters
		5	alpha [÷]	Q	Q	Character Q (Fontcode : 0051 ₁₆)	Character			Characters
	6	1	alpha [↑]	↑ (HOME←)	Cursor to begin	Jump to top left of alpha input	Command			Text input
		2	alpha [4]	R	R	Character R (Fontcode : 0052 ₁₆)	Character			Characters
		3	alpha [5]	S	S	Character S (Fontcode : 0053 ₁₆)	Character			Characters
		4	alpha [6]	T	T	Character T (Fontcode : 0054 ₁₆)	Character			Characters
		5	alpha [x]	U	U	Character U (Fontcode : 0055 ₁₆)	Character			Characters
	7	1	alpha [↓]	↓ (END→)	Cursor to end	Jump to bottom right of alpha input	Command			Text input
		2	alpha [1]	V	V	Character V (Fontcode : 0056 ₁₆)	Character			Characters
		3	alpha [2]	W	W	Character W (Fontcode : 0057 ₁₆)	Character			Characters
		4	alpha [3]	X	X	Character X (Fontcode : 0058 ₁₆)	Character			Characters
		5	alpha [-]	Y	Y	Character Y (Fontcode : 0059 ₁₆)	Character			Characters
	8	1	alpha [EXIT]	EXIT	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (g[DRG]) and spell the name as 'EXIT' ;	Command			Navigation
		2	alpha [0]	Z	Z	Character Z (Fontcode : 005A ₁₆)	Character			Characters
		3	alpha [.]	,	Comma	Character , (Fontcode : 002C ₁₆)	Character			Characters
		4	alpha [R/S]	?	Question mark	Character ? (Fontcode : 003F ₁₆)	Character			Characters
		5	alpha [+]	␣	Space	#N/A	Character	#N/A	#N/A	Characters
alpha f-shift	2	1	alpha f [x²]	a	a	Character a (Fontcode : 0061 ₁₆)	Character			Characters
		2	alpha f [√x]	b	b	Character b (Fontcode : 0062 ₁₆)	Character			Characters
		3	alpha f [¹/x]	c	c	Character c (Fontcode : 0063 ₁₆)	Character			Characters
		4	alpha f [y*]	d	d	Character d (Fontcode : 0064 ₁₆)	Character			Characters
		5	alpha f [LOG]	e	e	Character e (Fontcode : 0065 ₁₆)	Character			Characters
		6	alpha f [LN]	f	f	Character f (Fontcode : 0066 ₁₆)	Character			Characters
	3	1	alpha f [STO]	g	g	Character g (Fontcode : 0067 ₁₆)	Character			Characters
		2	alpha f [RCL]	h	h	Character h (Fontcode : 0068 ₁₆)	Character			Characters
		3	alpha f [R↓]	i	i	Character i (Fontcode : 0069 ₁₆)	Character			Characters
		4	alpha f [DRG]	j	j	Character j (Fontcode : 006A ₁₆)	Character			Characters
		5	alpha f [↔]	<f>lipchar	Flip case (one character)	Set next alpha entry to flip lower/UPPER case (one character) (Shortcut : alpha f + <char>)	Alpha-shift (special)			Text input
	4	1	alpha f [ENTER]	X.EDIT	Edit X	Edit contents of stack register X as text (Shortcut : alpha long [ENTER] ; EIM long [ENTER])	Command	X.EDIT		Text input
		2	alpha f [xzy]	k	k	Character k (Fontcode : 006B ₁₆)	Character			Characters
		3	alpha f [CHS]	l	l	Character l (Fontcode : 006C ₁₆)	Character			Characters
		4	alpha f [EEX]	m	m	Character m (Fontcode : 006D ₁₆)	Character			Characters
		5	alpha f [+]	CLA	Clear alpha	In Alpha Input Mode, clear alpha input buffer ; in Equation Input Mode, clear equation (alpha)	Command			Text input
	5	1	alpha f [XEQ]	α	alpha	Character α (Shortcut : alpha f [XEQ] ; Info : Fontcode : 03B1 ₁₆ ; press [↑] for A at [A...Ω.1] F1)	Character			Characters
		2	alpha f [7]	n	n	Character n (Fontcode : 006E ₁₆)	Character			Characters
		3	alpha f [8]	o	o	Character o (Fontcode : 006F ₁₆)	Character			Characters
		4	alpha f [9]	p	p	Character p (Fontcode : 0070 ₁₆)	Character			Characters
		5	alpha f [÷]	q	q	Character q (Fontcode : 0071 ₁₆)	Character			Characters
	6	1	alpha f [↑]	CASE UP	Alpha lock upwards	Move up alpha lock from A to a to N (Shortcut : alpha f [↑] ; Info : sets initial case of menu	Alpha-shift			Text input
		2	alpha f [4]	r	r	Character r (Fontcode : 0072 ₁₆)	Character			Characters
		3	alpha f [5]	s	s	Character s (Fontcode : 0073 ₁₆)	Character			Characters
		4	alpha f [6]	t	t	Character t (Fontcode : 0074 ₁₆)	Character			Characters
		5	alpha f [x]	u	u	Character u (Fontcode : 0075 ₁₆)	Character			Characters
	7	1	alpha f [↓]	CASE DN	Alpha lock downwards	Move down alpha lock from N to A to a (Shortcut : alpha f [↓] ; Info : sets initial case of menu	Alpha-shift			Text input
		2	alpha f [1]	v	v	Character v (Fontcode : 0076 ₁₆)	Character			Characters
		3	alpha f [2]	w	w	Character w (Fontcode : 0077 ₁₆)	Character			Characters
		4	alpha f [3]	x	x	Character x (Fontcode : 0078 ₁₆)	Character			Characters
		5	alpha f [-]	y	y	Character y (Fontcode : 0079 ₁₆)	Character			Characters
	8	1	alpha f [EXIT]	⏻	Off	Turn off calculator (Info : On the simulator, pressing OFF or quitting the application saves the	Command	OFF		System
		2	alpha f [0]	z	z	Character z (Fontcode : 007A ₁₆)	Character			Characters
		3	alpha f [.]	;	Semicolon	Character ; (Shortcut : alpha f [.] ; Info : Fontcode : 003B ₁₆)	Character			Characters
		4	alpha f [R/S]	:	Colon	Character : ; in the equation editor, the colon can be used to name an expression (<name> :	Character			Characters
		5	alpha f [+]	[CAT]	Catalog (alpha)	Catalog of items available in Alpha Input Mode (Info : CAT [EQN] is available on keyboard f [+]	MENU	CATe		Catalog

Layer	Row	Column	Key	Layoutlabel	Fullname	Extended description	Type	Catalog	Default	Category
alpha g-shift	2	1	alpha g [x^2]	$\dot{i}$	Complex i	Character $\dot{i}$ (Shortcut : alpha g [x^2] ; Info : Fontcode : 2148 ₁₆)	Character			Characters
		2	alpha g [$\sqrt{x}$]	$\checkmark$	Square root	Square root (Shortcut : alpha g [$\sqrt{x}$] ; Fontcode : 221A ₁₆)	Character			Mathematics
		3	alpha g [$^{1/x}$]	!	Exclamation mark	In edit equation, used as Factorial x! or $\Gamma(x+1)$ (Shortcut : alpha g [$^{1/x}$] ; Fontcode : 0021 ₁₆)	Character			Mathematics and characters
		4	alpha g [y^*]	^	Circumflex accent	Raise to power (Shortcut : alpha g [y^*] ; Fontcode : 005E ₁₆)	Character			Mathematics and characters
		5	alpha g [LOG]	e	eEuler	Character e (Shortcut : alpha g [LOG] ; Info : Fontcode : 2147 ₁₆)	Character			Characters
		6	alpha g [LN]	#	Number sign	Number sign, used for Short integer (8.02-8.16) base (Shortcut : alpha g [LN] ; Fontcode : 0023 ₁₆)	Character			Number bases
	3	1	alpha g [STO]		Bar	Open or close absolute value (Shortcut : alpha g [STO] ; Fontcode : 007C ₁₆)	Character			Mathematics and characters
		2	alpha g [RCL]	Δ	DELTA	Character Δ (Shortcut : alpha g [RCL] ; Info : Fontcode : 0394 ₁₆ ; press [↵] for δ at [A...Ω.1] F4)	Character			Characters
		3	alpha g [R+]]	π	pi	Greek character π (Shortcut : alpha g [R+] ; Info : Fontcode : 03C0 ₁₆ ; press [↵] for Π at [A...Ω.1] gF5)	Character			Mathematics and characters
		4	alpha g [DRG]	j	Complex j	Character j (Shortcut : alpha g [DRG] ; Info : Fontcode : 2149 ₁₆)	Character			Characters
		6	alpha g [<g>]	di<g>it	Set numeric (one digit)	Set next alpha entry to numeric (one digit) or other alpha g-shifted character (Shortcut :	Alpha-shift (special)			Text input
	4	1	alpha g [ENTER]	↵	Carriage return	Character ↵ (Shortcut : alpha g [ENTER] ; alpha longer [ENTER] ; EIM longer [ENTER] ; Info : Fontcode : 21B5 ₁₆)	Character			Characters
		2	alpha g [x↔y]	↔	Left right arrow	Character ↔ (Shortcut : alpha g [x↔y] ; Info : Fontcode : 21C4 ₁₆)	Character			Characters
		3	alpha g [CHS]	±	Plus-minus	Character ± (Shortcut : alpha g [CHS] ; Info : Fontcode : 00B1 ₁₆)	Character			Characters
		4	alpha g [EEX]	<E>	Exponent sign (AIM)	Character E (displays as outline E in numeric font) (Shortcut : alpha g [EEX] ; Info : Fontcode : 2073 ₁₆)	Character			Characters
		5	alpha g [+]	CLA	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			Text input
	5	1	alpha g [XEQ]	ω	omega	Character ω (Fontcode : 03C9 ₁₆ ; Info : press [↵] for Ω at [A...Ω.2] fF3)	Character			Characters
		2	alpha g [7]	7	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Character			Numeric input
		3	alpha g [8]	8	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Character			Numeric input
		4	alpha g [9]	9	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Character			Numeric input
		5	alpha g [÷]	÷	Obelus	Character ÷ (Shortcut : alpha g [÷] ; Info : Fontcode : 00F7 ₁₆)	Character			Characters
	6	1	alpha g [↑]	↑ (α ^{SUP})	Superscript	Superscript (Shortcut : alpha g [↑])	Alpha-shift			Text input
		2	alpha g [4]	4	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Character			Numeric input
		3	alpha g [5]	5	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Character			Numeric input
		4	alpha g [6]	6	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Character			Numeric input
		5	alpha g [×]	×	Cross	Character × (Shortcut : alpha g [×] ; Info : Fontcode : 00D7 ₁₆)	Character			Characters
	7	1	alpha g [↓]	↓ (α _{SUB})	Subscript	Subscript (Shortcut : alpha g [↓])	Alpha-shift			Text input
		2	alpha g [1]	1	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Character			Numeric input
		3	alpha g [2]	2	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Character			Numeric input
		4	alpha g [3]	3	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Character			Numeric input
		5	alpha g [-]	-	Minus	Minus (Shortcut : alpha g [-] ; Info : Fontcode : 002D ₁₆)	Character			Characters
	8	1	alpha g [EXIT]	SNAP	Screenshot	Save screenshot to backup file (.bmp) and save contents of stack or alpha buffer as backup	Command	SNAP		Input-Output
		2	alpha g [0]	0	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Character			Numeric input
		3	alpha g [.]	.	Full stop	Character . (Shortcut : alpha g [.] ; Info : Fontcode : 002E ₁₆)	Character			Characters
		4	alpha g [R/S]	/	Slash	Character / (Shortcut : alpha g [R/S] ; Info : Fontcode : 002F ₁₆)	Character			Characters
		5	alpha g [+]	+	Plus	Plus (Shortcut : alpha g [+] ; Info : Fontcode : 002B ₁₆)	Character			Characters
TAM	2	1	TAM [x^2]	{A}	Register A	Easy access to Register A (104) : Stack level 5 (Shortcut : STO/RCL {A} ; TI : A:)	EasyAccess (TAM)			Trailing input
		2	TAM [$\sqrt{x}$]	{B}	Register B	Easy access to Register B (105) : Stack level 6 (Shortcut : STO/RCL {B} ; TI : B:)	EasyAccess (TAM)			Trailing input
		3	TAM [$^{1/x}$]	{C}	Register C	Easy access to Register C (106) : Stack level 7 (Shortcut : STO/RCL {C} ; TI : C:)	EasyAccess (TAM)			Trailing input
		4	TAM [y^*]	{D}	Register D	Easy access to Register D (107) : Stack level 8 (Shortcut : STO/RCL {D} ; TI : D:)	EasyAccess (TAM)			Trailing input
		5	TAM [LOG]	{E}	Register E	Easy access to Register E (217) : General purpose register E (Shortcut : STO/RCL {E} ; TI : E:)	EasyAccess (TAM)			Trailing input
		6	TAM [LN]	{F}	Register F	Easy access to Register F (218) : General purpose register F (Shortcut : STO/RCL {F} ; TI : F:)	EasyAccess (TAM)			Trailing input
	3	1	TAM [STO]	{G}	Register G	Easy access to Register G (219) : General purpose register G ; also used to store third to last	EasyAccess (TAM)			Trailing input
		2	TAM [RCL]	{H}	Register H	Easy access to Register H (220) : General purpose register H ; also used to store second to	EasyAccess (TAM)			Trailing input
		3	TAM [R+]]	{I}	Register I	Easy access to Register I (109) : General purpose register I ; also used to store current row	EasyAccess (TAM)			Trailing input
		4	TAM [DRG]	{J}	Register J	Easy access to Register J (110) : General purpose register J ; also used to store current	EasyAccess (TAM)			Trailing input

Layer	Row	Column	Key	Layoutlabel	Fullname	Extended description	Type	Catalog	Default	Category
		5	TAM [<f>]	<f>	Shift f	Shift f (yellow) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the	f-shift	f		Keyboard
		6	TAM [<g>]	<g>	Shift g	Shift g (blue) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the <g> key is marked with a white label «CUST» hinting at the default longpress shortcut to menu	g-shift	g		Keyboard
	4	1	TAM [ENTER]	ENTER	Enter	If eRPN is SET, in Numeric Input Mode, ENTER pushes the input value onto the stack, and if	Command	ENTER		Stack
		2	TAM [xzy]	{K}	Register K	Easy access to Register K (111) : General purpose register K ; also used in VarMNU to store	EasyAccess (TAM)			Trailing input
		3	TAM [CHS]	{L}	Register L	Easy access to Register L (108) : Last X (Shortcut : STO/RCL {L} ; TI : L)	EasyAccess (TAM)			Trailing input
		4	TAM [EEX]	{M}	Register M	Easy access to Register M (211) : General purpose register M ; also used to store distribution	EasyAccess (TAM)			Trailing input
		5	TAM [+]	+	Backspace	Backspace : clear input when in Numeric Input Mode ; when not in NIM, executes DROPx ; CLX	Command (nonpgm)	BACK		Cleanup
	5	1	TAM [XEQ]	[TamAlpha]	TAM mode (alpha)	Transient Alpha Mode is activated for trailing input (alpha) (Shortcut : Activated from TAM	MENU (TAM)			Trailing input
		2	TAM [7]	7	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Digit			Numeric input
		3	TAM [8]	8	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Digit			Numeric input
		4	TAM [9]	9	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Digit			Numeric input
		5	TAM [÷]	÷	Divide	Divide Y by X	Function (dyadic)	÷		Mathematics
	6	1	TAM [↑]	↑	Up	Scroll up for menus and browser screens or backstep through program steps (Info : To assign	Command			Navigation
		2	TAM [4]	4	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Digit			Numeric input
		3	TAM [5]	5	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Digit			Numeric input
		4	TAM [6]	6	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Digit			Numeric input
		5	TAM [x]	x	Multiply	Multiply Y by X	Function (dyadic)	x		Mathematics
	7	1	TAM [↓]	↓	Down	Scroll down for menus and browser screens or single step through program steps (Info : To	Command			Navigation
		2	TAM [1]	1	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Digit			Numeric input
		3	TAM [2]	2	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Digit			Numeric input
		4	TAM [3]	3	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Digit			Numeric input
		5	TAM [-]	-	Subtract	Subtract X from Y	Function (dyadic)	-		Mathematics
	8	1	TAM [EXIT]	EXIT	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (g[DR6]) and spell the name as 'EXIT' ;	Command			Navigation
		2	TAM [0]	0	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Digit			Numeric input
		3	TAM [.]	.	Full stop	Character . (Shortcut : alpha g[.] ; Info : Fontcode : 002E ₁₆)	Character			Characters
		5	TAM [+]	+	Add	Add X to Y ; concatenate X and Y, including numbers, dates and times + strings and vice versa	Function (dyadic)	+		Mathematics
#TAM	2	2	#TAM [√x]	BIN	Binary	Convert X to binary and toggle binary mode ; entering digits A-F switches the calculator to	Setting (pgm)	BIN	OFF	Number bases
		4	#TAM [y*]	DEC	Decimal (short integer)	Convert X to decimal (short integer) and toggle decimal (short integer) mode ; entering digits	Setting (pgm)	DEC	OFF	Number bases
		6	#TAM [LN]	FP	Fractional Part	Fractional Part of real number (Shortcut : #TAM [LN] (F) for closed number)	Function (monadic)	FP		Fractions
	3	2	#TAM [RCL]	HEX	Hexadecimal	Convert X to hexadecimal and toggle hexadecimal mode ; if KEY _{A-F} is SET, digits A-F can be	Setting (pgm)	HEX	OFF	Number bases
		3	#TAM [R↓]	IP	Integer Part	Integer Part of number (returns Real number) (Shortcut : #TAM [R↓] (I) for closed number)	Function (monadic)	IP		Fractions
		5	#TAM [<f>]	<f>	Shift f	Shift f (yellow) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the <f> key is marked with a white label «HOME» indicating the default longpress shortcut to menu HOME and the option to use USER mode assignment to longpress <f> (if KEY.LP is SET, see menu	f-shift	f		Keyboard
		6	#TAM [<g>]	<g>	Shift g	Shift g (blue) (Info : SBI position depends on flag SBshfR ; on the R47, the bezel above the <g>	g-shift	g		Keyboard
	4	1	#TAM [ENTER]	DEC	Decimal (short integer)	Convert X to decimal (short integer) and toggle decimal (short integer) mode ; entering digits	Setting (pgm)	DEC	OFF	Number bases
		5	#TAM [+]	+	Backspace	Backspace : clear input when in Numeric Input Mode ; when not in NIM, executes DROPx ; CLX	Command (nonpgm)	BACK		Cleanup
	5	2	#TAM [7]	7	Digit 7	Digit 7 (Fontcode : 0037 ₁₆)	Digit			Numeric input
		3	#TAM [8]	8	Digit 8	Digit 8 (Fontcode : 0038 ₁₆)	Digit			Numeric input
		4	#TAM [9]	9	Digit 9	Digit 9 (Fontcode : 0039 ₁₆)	Digit			Numeric input
	6	2	#TAM [4]	4	Digit 4	Digit 4 (Fontcode : 0034 ₁₆)	Digit			Numeric input
		3	#TAM [5]	5	Digit 5	Digit 5 (Fontcode : 0035 ₁₆)	Digit			Numeric input
		4	#TAM [6]	6	Digit 6	Digit 6 (Fontcode : 0036 ₁₆)	Digit			Numeric input
	7	2	#TAM [1]	1	Digit 1	Digit 1 (Fontcode : 0031 ₁₆)	Digit			Numeric input
		3	#TAM [2]	2	Digit 2	Digit 2 (Fontcode : 0032 ₁₆)	Digit			Numeric input
		4	#TAM [3]	3	Digit 3	Digit 3 (Fontcode : 0033 ₁₆)	Digit			Numeric input
	8	1	#TAM [EXIT]	EXIT	Exit	Exit (Info : To assign EXIT to a key or button, use ASN (g[DR6]) and spell the name as 'EXIT' ; Ref : https://47calc.com/doc/R47/Reference/R47v0_Assignment.pdf)	Command			Navigation
		2	#TAM [0]	0	Digit 0	Digit 0 (Fontcode : 0030 ₁₆)	Digit			Numeric input