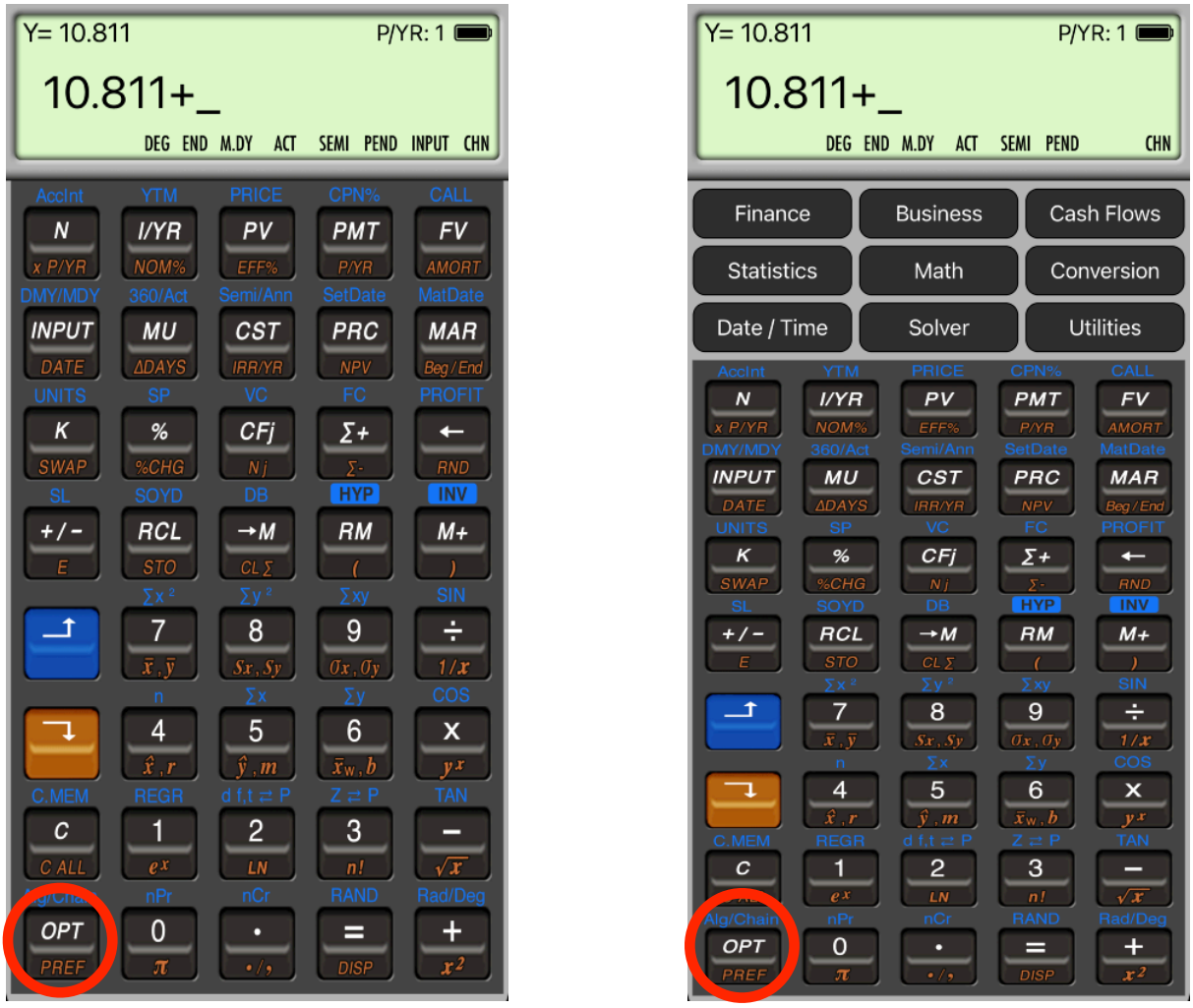
General Overview

The **RLM-10BX** calculator application is an extensive set of tools and enhancements inspired in the real HP-10B calculator series made by Hewlett Packard. The first “HP-10B” calculator was designed and introduced by Hewlett Packard in 1989 and it was a low cost, student level, business and financial algebraic calculator.

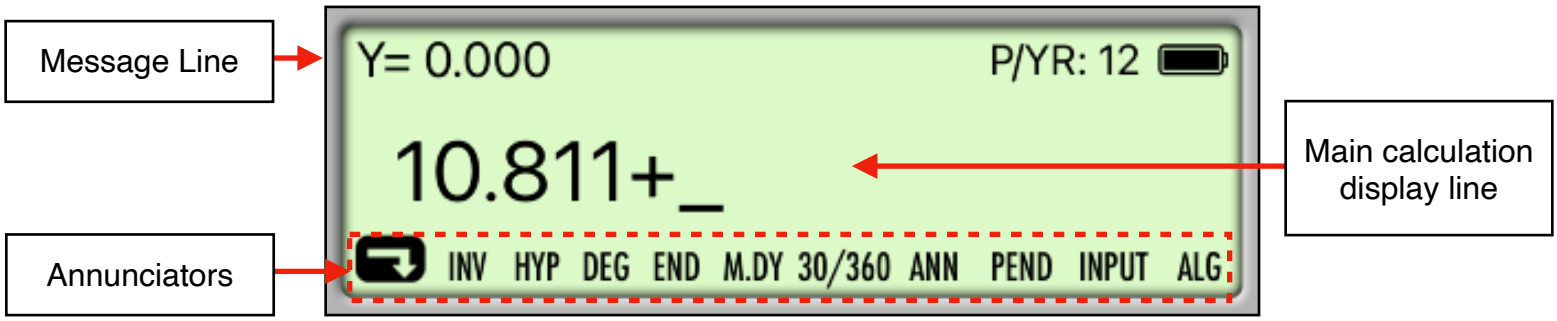
Basically, the **RLM-10BX** includes all the functionality of the lates HP-10BII+ calculator model, but widely expanded with additional menus that rises the functionalities to the top professional level of financial and business calculators, keeping the easy to use and understand, with the best user experience in modern iOS devices.



Shows or Hide the Main Menu

Since the calculator is inspired in the real HP-10BII+, we strongly recommend that you obtain the original calculator Owner’s Manual available in internet and review all the help topics from the top buttons of the HELP view.

Calculator Display



The RLM-10BX calculator's display has three areas: the message line, the main calculation line and the annunciators line.

Message line: At the left shows the value in the Y register or a relevant message depending of the calculation performed. At the right, shows the current P/YR value for TVM calculations and the "Virtual Battery" status (full means 30 days remaining of usage).

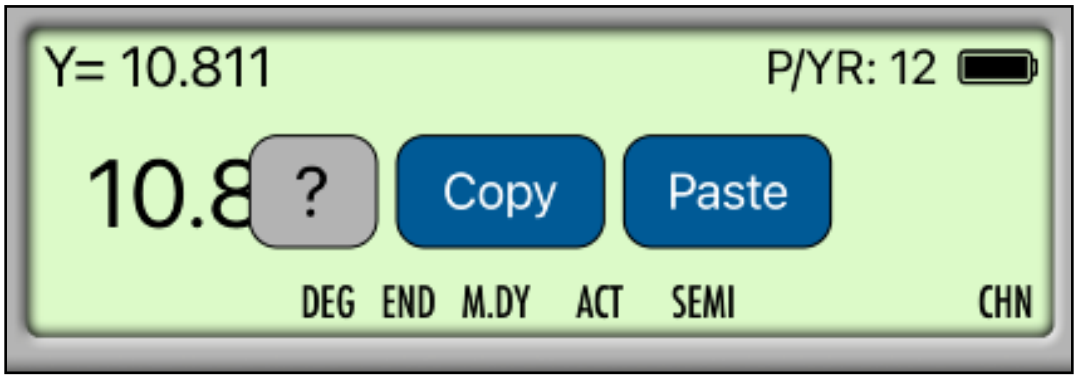
Main Calculation line: Shows the current entered number, a calculation in progress or a calculation result.

Annunciators: Show the current status of the calculators:

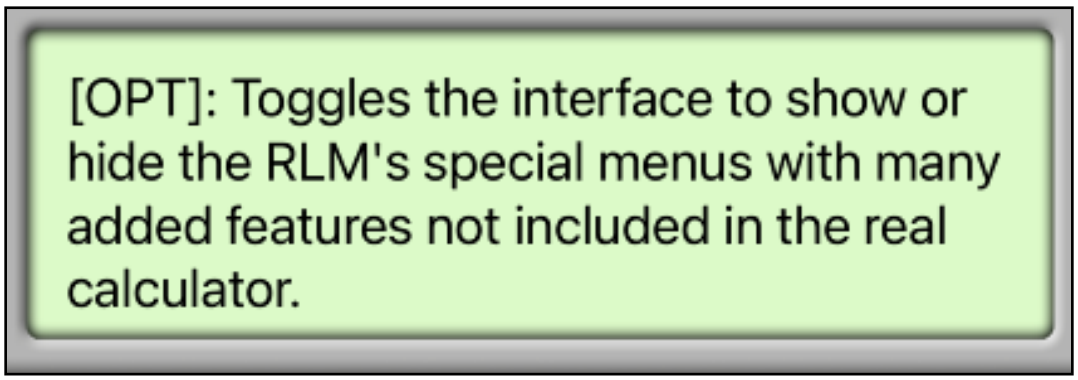
Display Annunciators	
	When shown, the shift up (blue) or shift down (orange) functions are active in the keyboard.
INV	When shown, the inverse function is active (🟦 **INV**).
HYP	When shown, the hyperbolic function is active (🟦 **HYP**).
DEG, RAD, GRD, DMS or ◿**%**	Shows current angular unit (Degrees, Radians, Gradians, Degree-Minute-Second. Or Slope Percent
BEG or **END**	Shows the current Payment mode, at the beginning or end of each period.
M.DY, D.MY, Y.MD	Shows the current date format.
ACT, 30/360	Shows the current calendar mode for bond calculations
ANN, SEMI	Shows the current coupon type for bond calculations.

Display Annunciators	
PEND	When shown, a pending calculation is active.
INPUT	When shown, a number was entered into the Y register touching the INPUT key.
ALG, CHN	Shows the current operating mode, Chain or Algebraic (in CHN mode, 1+2x3 is equal 9, in ALG mode is equal 7).

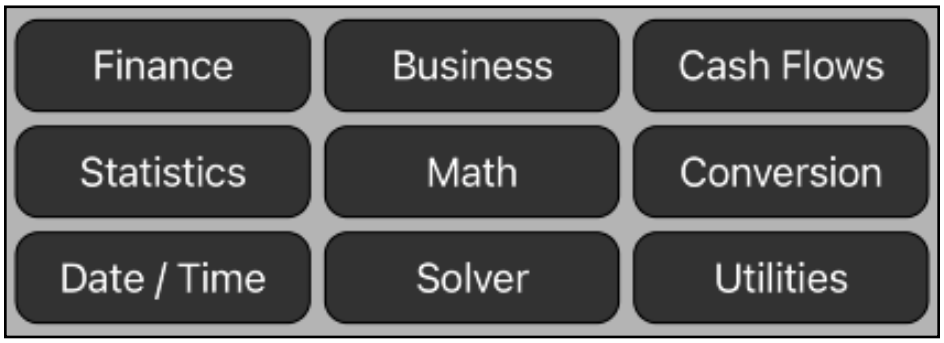
Touching the display at any time brings up the Help-Copy-Paste buttons to the front. There you can “Copy” the displayed number or “Paste” previously copied one.



The “**?**” button turn on the quick help hint for for a short description of any keyboard or menu button action. As an example, in the following picture, the quick help for the “**OPT**” key is shown. To get back to the normal display, simply touch the display again.



Main Menu



Finance Menu	
Account Balance	Calculates the balance of a credit line type account at any date based on cash transactions and interest rates applied.
Amortization	Calculates a loan Amortization Schedule from a single loan payment or from several payments at once.
Bond Price & Yield	Calculates annual or semi-annual coupons bonds with actual calendar or 360 days year in an easy way with all at sight.
Black-Scholes Options	Calculates the prices of a CALL option, PUT option and the Greeks values using the Black-Scholes European option valuation model.
Depreciation	Calculates the Depreciation Schedule of an asset with all the values at sight, using SL, SOYD, DB or ACRS methods.
Interest Conversion	Calculates nominal and effective interest rates using either periodic or continuous compounding.
TVM: Time Value of Money	Calculates compound Interest problems involving money earning interest over a period of time.
Business Menu	
Bill-Tip-Split	Calculates the total and the amount to pay per person based on a bill amount, a number of persons and a tip percent or amount.
Break-Even	Analyze a break-even analysis based on the following equation: Profit = (Price - Var.Cost) • Units - Fix.Cost
Currency Exchange	Calculates a currency exchange between two selected world currencies and common crypto currencies.
Margins	Calculates the business margin, mark-up, price or cost with all values at sight.
Percents	Calculates percent change and percent total in a single menu with all values at sight.

Cash Flows Menu	
> Load (CFj, Nj) List	Load a previously created “(CFj, Nj) List” to the calculator.
Equal Periods	Solve problems where different cash flows occur at regular time intervals.
Unequal Periods	Solve problems where different cash flows occur at different dates.
Statistics Menu	
> Load (X,Y) List	Load a previously created “(X, Y) List” to the calculator.
X,Y Statistics	Calculates statistical functions over the current (X,Y) List data samples.
Curve Fitting	Applies a regression model to fit a curve based on two-variables data samples.
Probability	Calculates combinations, permutations and probability densities and lower-tail cumulative probability of selected distribution.
Math Menu	
Hyperbolic	Applies Hyperbolic functions to the displayed number.
Logarithm	Applies Logarithmic functions to the displayed number.
Number Alteration	Applies common number alteration functions.
Trigonometry	Applies Trigonometric functions to the displayed number.
Triangle Solution	Solves a two dimensional triangle knowing 2 values and one side.
Conversion Menu	
Angles	Calculates angle units conversions.
Currencies	Calculates a currency exchange between two selected world currencies and common crypto currencies.
Interest Rates	Calculates nominal and effective interest rates using either periodic or continuous compounding.
Polar-Rectangular	Performs conversion between rectangular X,Y coordinates to polar R,Ø coordinates.
Units	Calculates physical units conversions.

Date / Time Menu	
Calculates Date and Time calculations with all values at sight.	
Solver Menu	
Solve arbitrary algebraic equations entered and saved in the equation editor and creates a menu with all the equation variables to solve any of them.	
Utilities Menu	
General Settings	Shows a view to customize the calculator to your preference.
Memory Content	Shows a view to see all memory content and backup or restore it.
Help Documents	Shows the help view to learn by example about all the calculator's menus.
> Editors	Shows a submenu to select one of the different data editors.
(Date, Transaction) List	Opens an editor to create a "(Date, Transaction) List".
(Date, CF) List	Opens an editor to create a "(Date, CF) List".
(CFj, Nj) List	Opens an editor to create a "(CFj, Nj) List".
(X,Y) List	Opens an editor to create a "(X,Y) List".
Solver Equation	Opens an editor to create or edit equation used by the Solver.
Units Conversion	Opens an editor to create or edit physical units.

For further information and support go to...
"www.rlmtools.com"

or send an email to...
"support@rlmtools.com"