General Overview of RLM-19BII

The RLM-19BII calculator application is a extensive set of tools and enhancements builded over a modified simulation of the real HP-19BII Business Consultant II calculator by Hewlett Packard. The real "HP-19BII" was designed and introduced by Hewlett Packard in 1990 and after more than 20 years, it still is one of the most powerful and easy to use financial calculator ever made.

Basically, The RLM-19BII includes all the functionality of the real calculator. Nevertheless, some functionalities were added, modified or deleted in order to have a calculator with the best user experience in the modern iPhone and iPod touch devices.

Added and Modified Functionality:
- Expanded 4 lines Display showing the entire history stack registers X, Y, Z, and T.
- Operation Precedence Setting and status bar indicator. The operation precedence change the way of calculations are performed in ALG mode. For example, 2 + 4 x 5 result in 22 instead of 30, because the "x" operation takes precedence before the "+" operation.
- Keyboard Direct Access to Scientific Menus, for "NUM", "LOGS", "TRIG", "HYP" and "CONV" menus.
- Black-Scholes Option Valuation Model calculation menu ("BSCH") was added in the "FIN" menu.
- TIP% calculation menu added under the "BUS" menu to calculate the BILL-TIP%-TOTAL-SPLIT relation.
- Scientific Functions layers to perform trigonometric, hyperbolic or log calculations directly through "SHIFT" keyboard keys "1" to "9".
- CFLO and SUM List Editors was added to improve the creation and edition of cash flows and statistics lists.
- SOLVER Equations Editor was added to quickly enter formulas and sort variable menus.

- <u>Currency Exchange</u> with Google finance On-Line rates for all current world currencies.
- <u>"DISP" and "Modes" menus</u> were replaced by a new "PREF" key were all the calculator settings can be adjusted in a single view.
- <u>The "CONV" menu</u> gathers all the conversions including Interest Conversions ("ICONV"), Angle Conversions ("ANGLE"), Currency Conversions ("CURRX"), Polar to Rectangular ("P-R") conversion and Units conversions ("UNITS").
- <u>UNITS conversions</u> with expanded database.
- <u>ANGLE conversions</u> for radians, gradians, decimal degrees and degree-minute-second.
- <u>The MEM key</u> shows the Memory Registers View instead of the available memory bytes. This view also allows you to backup the entire content of the calculator memory, including lists and solver equations.
- <u>The CFLO and SUM list</u> has the same format, both have the value and frequency or number of repetitions.
- <u>The Menu keys</u> are color coded: ⬜ means another menu will be shown; ⬛ stores the displayed number in the corresponding variable; 🟥 calculates the corresponding variable or apply a function; and 🟦 stores or calculates the corresponding variable.
- The `STO` and `RCL` with arithmetic operations (+, -, x, ÷ or ^) can be used to store or recall numbers in any Memory Register or Menu Variable (Black or Blue menu button).

Removed Functionality:
- The Text and Appointments ("TEXT" and "APPT" menus) functionality were completely removed since the iOS already includes apps to manage those functions in a better way (Calendar, Contacts & Notes).
- The "PRINTER" and "PRNT" commands were removed and AirPrint functionality was added in some views where it maters.
- At the moment, RLM-19BII is in english language only. All other languages present in the real HP 19BII were removed.

Status Bar

Calculation Display

Main Menu

Conversions Menu

Preferences View

Hyperbolic Menu

Trigonometric Menu

Logarithm Menu

Number Functions Menu

Scientific Menu

Memory Registers content view

Quick Help View

The Status Bar

The Status Bar shows seven indicators according the current calculator status. The indicators are:

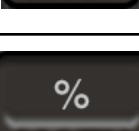|	
⤵	The 🔴 shift key was touched. The "**Red**" functions are active.
ALG **RPN**	Entry Logic indicator: Algebraic or Reverse Polish Notation.
M.DY **D.MY**	Date Format indicator: Month-Day-Year or Day-Month-Year.
RAD **DEG** **GRAD**	Angular mode indicator: Radians, Degrees or Gradians.
^ x ÷	Operations precedence indicator: When "**ON**", the operations precedence is "^", "x" or "÷" and "+" or "-". For example, when "**ON**", 2 + 4 x 5 is equal to 22; if **OFF**, 2 + 4 x 5 is equal to 30.
(Indicators showed Only in TVM menu)	
BEG **END**	Current "PMT" mode indicator: Wether the payment occurs at Begin or End of each period.
"n" P/YR	Current "n" compounding periods per year (P/YR) value.
(Indicators showed Only in BOND menu)	
A/A **30/360**	Current Bond calendar mode indicator: Actual calendar or 30 days month / 360 days year.
ANNUAL **SEMI**	Current Bond type; Annual coupon or Semiannual coupon payments.

Keyboard Menu Keys

Keyboard	Menu Bar Showed
EXIT / MAIN	Exit the current menu and shows the previous menu bar.
[red] **EXIT** / MAIN	Goes back to the **Main** menu bar.
CONV / TRIG	Shows the **Conversions** calculations menu (This key doesn't exist in the real calculator).
PREF / HYP	Shows the **Preferences View** to customize de calculator (This key doesn't exist in the real calculator).
[red] **STO** / NUM	Shows the **Numeric** functions menu.
[red] **RCL** / LOG	Shows the **Logarithmic and exponential** functions menu.
[red] **CONV** / TRIG	Shows the **Trigonometric** functions menu.
[red] **PREF** / HYP	Shows the **Hyperbolic** functions menu.
[red] **%** / MATH	Shows the **Math menu** to select functions menu.
[red] **0** / MEM	Shows the **Memory View**.

Main Menu Bar

FIN	Shows the **Finance** menu to select for Time-value of-money (loans, savings, leasing, mortgages), Interest conversions, Cash flows net present value and internal rate of return, Bonds price and yield, depreciation, or Stock options valuation.
BUS	Shows the **General Business** menu to select Percent Change, Percent of Total, Markup on Price, Markup on Cost, or Bill-Tip-Total-Split calculations.
SUM	Shows the **Statistical** menu to enter and edit statistical list of samples, and perform calculations and regression models over the data lists.
TIME	Shows the **Time & Date** menu to perform time and date arithmetics.
SOLVE	Shows the **Equation Solver** menu to enter an edit equations to solve in their own menu of variables.

This Help View keeps a record of the topics viewed, at any time you can get back to the previous selected topic pressing the **Back** button.

The selected topic can be printed in an Air Print capable printer. Simply touch the **Print** button to show the Air Print view.

To close the Help View and get back to the RLM-19BII main interface, touch the **Close** button below.

Press any of the help topic buttons in the list to show an explanation of each subject.

For further information and support go to...

"www.rlmtools.com/iPhone/19BII"

or send an email to...

"support@rlmtools.com"

DISCLAIMER: THIS IS NOT A HEWLETT PACKARD CALCULATOR, AND IS NOT SPONSORED IN ANYWAY BY HEWLETT PACKARD OR ANY OF ITS SUBSIDIARIES.