MxCalc

for Palm OS

Version 2.1.1

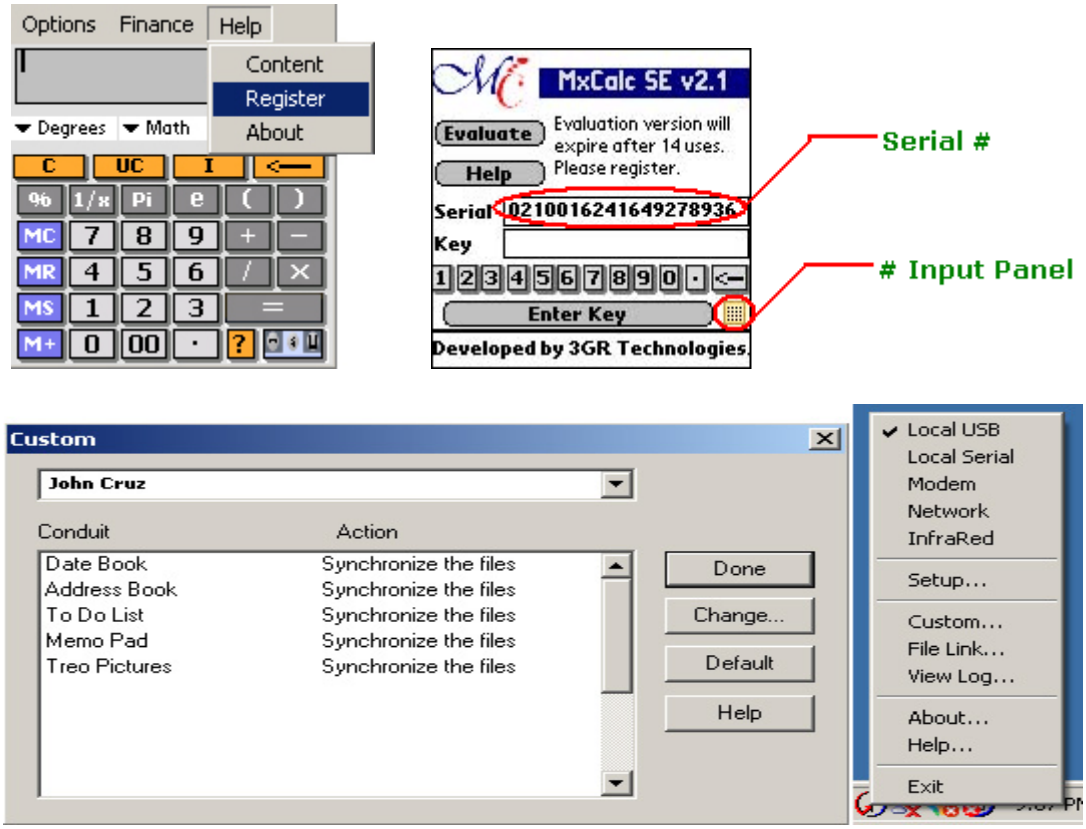
User Guide

Product of :-

3GR Technologies

For Installation information & Sales/Support contacts refer the Read Me file.

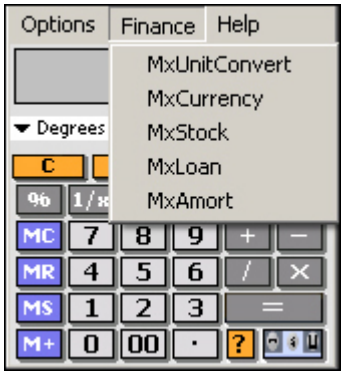
Registration

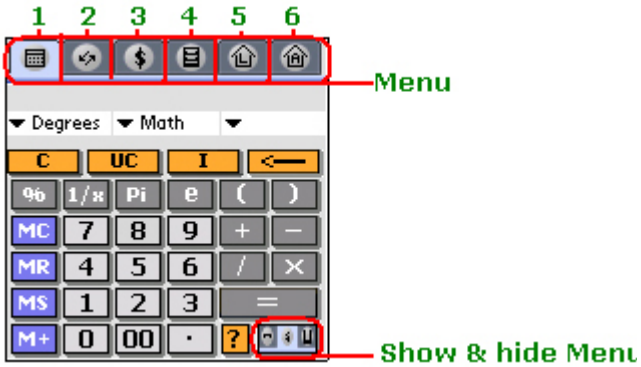


To register you will need the HotSync ID. You can locate the HotSync ID as shown above. Select 'Custom' by clicking on the HotSync Icon in the System Tray.
In the above example 'John Cruz' is the HotSync ID.

Enter the key provided with your purchase (or later via email) in the input area below the serial # and tap on 'Enter Key' button.

Main Menu



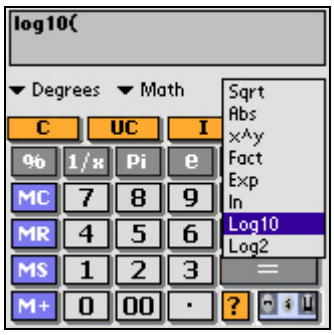


1. **MxCalc–Scientific Evaluator.**
2. **MxUnitConvert.**
3. **MxCurrency.**
4. **MxStock.**
5. **MxLoan.**
6. **MxAmort.**

MxCalc – Scientific Evaluator

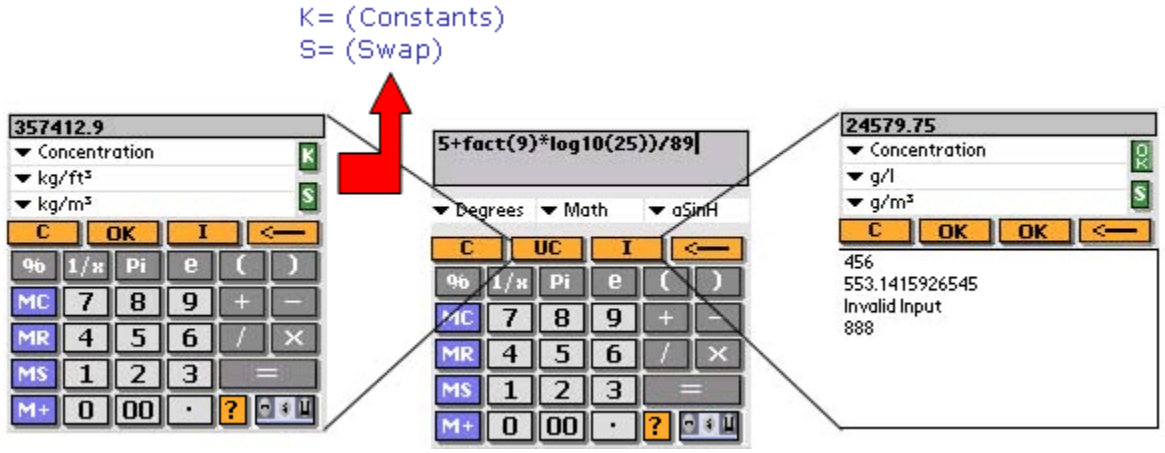
with Quick Unit & Currency Conversion

Evaluate



Select the Function from the drop to insert in the Input Box at the top of the screen. For e.g. If you want to evaluate to Log10 of a value then Select 'Math' & then select Log10 from the Drop down list on the right side. Remember to close all the brackets else the program will give a Syntax Error (Invalid Input).

Convert



(Tap on the '**UC**' button to launch the converter embedded in MxCalc. To launch other finance modules please go to the Finance Menu)

This module of Unit Converter offers a very comprehensive collection of properties with respective units. A very usefull utility to Convert Values from one unit to another.

Following are the steps for Converting Values :-

1. Choose a property from the Property list.

2. Enter the value and Choose a unit from the Units From list

3. Choose a unit from the Units To list to see the conversion.

4. If any constants are available for the physical property, they show up in the '**K**' (Constants) list.

You can use the '**S**' button to swap the value entered in '**From**' (Units From) list with the value entered in '**To**' (Units To) list.

Supported Functions

Trigonometric Functions :

- **sin** - Returns the sine of the given angle.
- **cos** - Returns the cosine of the given angle.
- **tan** - Returns the tangent of the given angle.
- **acos** - Returns the inverse hyperbolic cosine of any real number. Number must be greater than or equal to 1. The inverse hyperbolic cosine is the value whose hyperbolic cosine is number, so ACOSH(COSH(number)) equals number.
- **atan** - Returns the arctangent of a number. The arctangent is the angle whose tangent is number.
- **acot** - Returns the arccotangent of a number. The arccotangent is the angle whose tangent is number.
- **sinh** - Returns the hyperbolic sine of a real number.
- **cosh** - Returns the hyperbolic cosine of a real number
- **tanh** - Returns the hyperbolic tangent of a real number
- **asinh** - Returns the inverse hyperbolic sine of a real number. The inverse hyperbolic sine is the value whose hyperbolic sine is number, so ASINH(SINH(number)) equals number.
- **acosh** - Returns the inverse hyperbolic cosine of a number. Number must be greater than or equal to 1. The inverse hyperbolic cosine is the value whose hyperbolic cosine is number, so ACOSH(COSH(number)) equals number.
- **atanh** - Returns the inverse hyperbolic tangent of a number. Number must be between - 1 and 1 (excluding - 1 and 1). The inverse hyperbolic tangent is the value whose hyperbolic tangent is number, so ATANH(TANH(number))equals number.

Mathematical functions :

- **ln** - Returns the logarithm of a number to the natural base 'e'.
- **log** - Returns the logarithm of a number to the base 10.
- **abs** - Returns the absolute value of a number. The absolute value of a number is the number without its sign.
- **e[x]** - Returns e raised to the power of number. The constant e equals 2.71828182845904, the base of the natural logarithm. To calculate powers of other bases, use the exponentiation operator (^). EXP is the inverse of log, the natural logarithm of number.).
- **alog** - Returns the inverse logarithm of a number to the base 10.
- **1/x** - Returns the inverse of a number.
- **x^2** - Returns the square of the number.
- **x!** - Returns the factorial of a nonnegative number. The factorial of a number is equal to 1*2*3** number. If number is not an integer, it is truncated.
- **rand** - it Returns the random number.

All Functions List

- **Trigonometry function**
  Sin , Cos , Tan , asin , acos , atan , cot , sec , csc , acot , asec, acsc.
- **Hyperbolic Trigonometry Functions**
  sinH , cosH , tanH , asinH , acosH , atanH , cotH , SecH , cscH, acotH , asecH, acscH.
- **General Functions**
  deg , grad , rad , Exp , Log , log10 , log2 , fact , abs , sgn , Sqr , Rnd , int.

Supported Operators

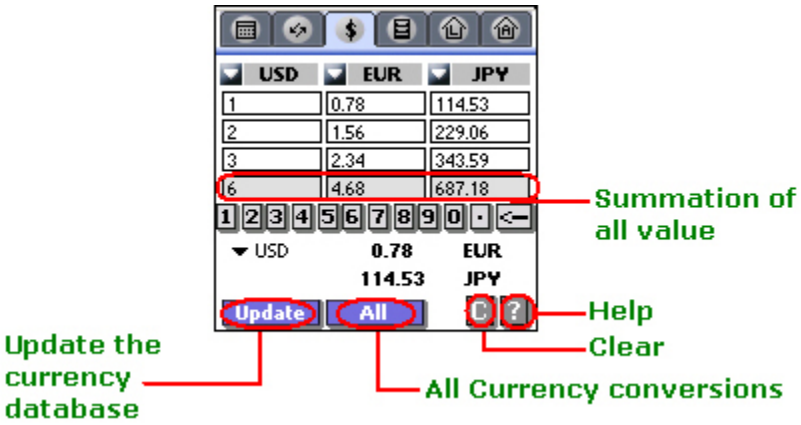
To perform basic mathematical operations such as addition, subtraction, or multiplication; combine numbers; and produce numeric results, use the following arithmetic operators.Arithmetic operator Meaning Example + (plus sign) Addition 2+2 – (minus sign) Subtraction Negation 2–1 –1* (asterisk) Multiplication 2*3/ (forward slash) Division 4/2 ^ (caret) Exponentiation 4^3 (ie..4*4*4)Operator Precedence

Operations are performed in a specific order. If you combine several operators in a single formula, the expression evaluator performs the operations in the order shown in the following table. If a formula contains operators with the same precedence, the like operators are evaluated from left to right. To change the order of operator precedence, enclose one or more calculations in arentheses. Operations within parentheses are always performed first. Precedence, - Negation (as in - 1) ^ Exponentiation , * Multiplication and / division, + and - Addition and subtraction

To avoid errors, please make sure that you match all open and close parentheses. Make sure all parentheses are part of a matching pair. Enter all required arguments. Some functions have required arguments. Also, make sure you have not entered too many arguments.

MxCurrency

Convert currency values is similar to converting any other Unit value. Tap on the UC button, select CURRENCY property and then select the From & To Currency Codes.

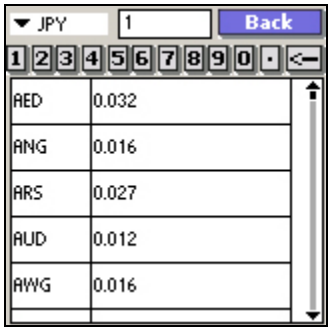


Select the Currency and enter the value in the Text boxes available below that. The last box will show the summation of all the values. The drop down at the bottom is to show the factor for the currencies converted.

Note : - Use the Numeric Input Panel to Convert the Values instantly. If you enter the values from Keyboard or Grafitti you need to tap the CONVERT button.

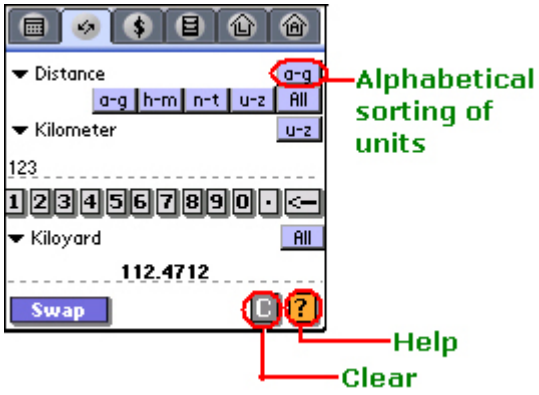
Update Currency Values

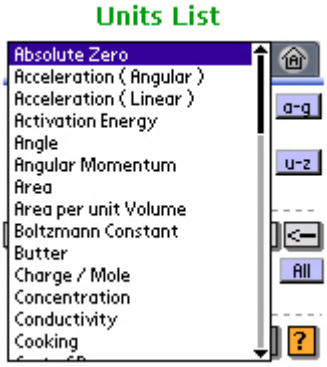
List of currencies

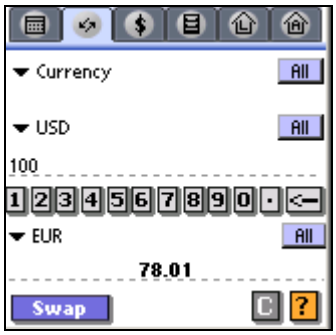


- Tap on the update button to get the current currencies conversion factors.
- The last updated date can be found at the top of the screen.
- In the 'All View' select the base currency from the top left corner of the screen.
- The all view can be used to check the current factors & all to convert the value for all the currencies.

MxUnitConverter







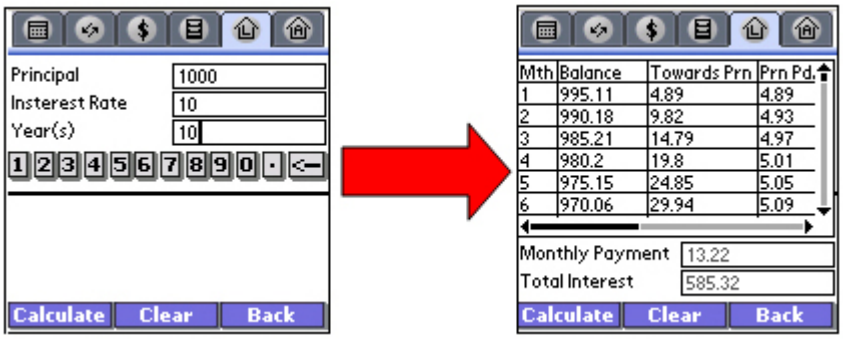
The Unit Converter also features a Currency Converter. This is usefull when you want to convert a large Amount. The Currency factors used in this module are same as the one used in MxCurrency. You can update the currencies factors from MxCurrency.

Properties

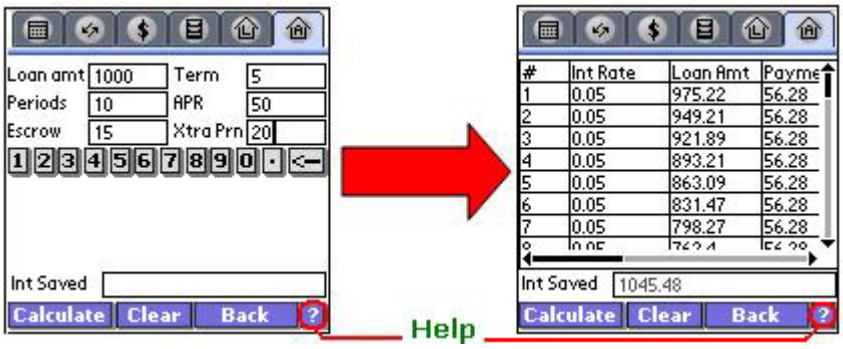
Absolute Zero
Acceleration (Angular)
Acceleration (Linear)
Activation Energy
Angle
Angular Momentum
Area
Area per unit Volume
Boltzmann Constant
Charge / Mole
Concentration
Conductivity
Cost of Power
Cp
Cutting Tools
Data Rate
Data Storage
Density
Depth
Dimensionless
Displacement
Enthalpy
Feed
Feet of Pipe
Flow Rate(Mass)
Flow Rate(Volume)
Force
Force (Body)
Force Per Unit Mass
Fouling Factor
Frequency
Fuel Efficiency
Geometric Displacement
Heat of Combustion
Heat of Fusion
Heat of Vaporisation
Heat Transfer Co-efficient
Height
Henry's Law Constant
Illuminance
Inductance
Integration Constant

Distance
Dynamic Fluidity (1/viscosity)
Electric Dipole Moment
Electric Field Strength
Electrical Capacitence
Electrical Charge
Electrical Conductivity
Electrical Current
Electrical Inductance
Electrical Potential
Electrical Resistance
Electrical Resistivity
Energy
Energy Flux
Energy per unit Area
Mass Per Unit Length
Mass Transfer Co-efficient
Molar Concentration
Molar FlowRate
Molar Heat Capacity
Molecular Weight
Moment of Inertia
Moment of Inertia (Area)
Momentum
Momentum Flow Rate
Momentum Flux
Number
Permeability
Permeability Factor
Photon Emission Rate
Population
Power
Power / Unit Mass
Power / Unit Volume
Press Impulse
Pressure
Pressure Gradient
Radioactive Dose
Radioactive Exposure
Radioactivity
Rate of Expenditure
Slope
Solid Angle
Specific Enthalpy
Specific Gravity
Specific Heat
Specific Heat Capacity
Specific Surface
Viscosity (Dynamic)
Viscosity (Kinematic)
Intensity of Ionising Radiation
Kinetic Energy of Turbulence
Length
Linear Momentum
Linear Thermal expansion coefficient
Luminance
Magnetic Field Strength
Magnetic Flux
Magnetic Flux Density
Magnetic Moment
Magnetomotive Force
Mass
Mass Density
Mass Flowrate
Mass Flux
Mass Per Unit Area
Viscosity (Kinematic)
Voltage (emf)
Voltage Ratio / Frequency
Volume
Volumetric Calorific Value
Volumetric Coefficient of Expansion
Volumetric Flow
Volumetric Mass Flowrate
Wave Number
Wavelength of max. Radiation Intensity
Width
Work
Temperature (Boiling pt. At 1 atm)
Torque Conversion
Cooking
Butter
Metric Conversion for Length
Mass(metric)
flow rate (mole) conversion
Electric Power
Currency
Specific Volume
Speed
Surface Tension
Temperature Difference
Thermal Conductance
Thermal Conductivity
Thermal Resistance
Time
Torque
Total Head
Turbulence Energy Dissipation Rate
U Value
Unit Power
Velocity
Velocity (Angular)
Velocity (Linear)

MxLoan



MxAmort



Loan Amount

Term :- # of years

Periods :- It can be weekly, bi- weekly, 2/month, monthly, Quaterly, 2/year or yearly. E.g Enter 12 in case of months and 4 in case of quaterly payments.

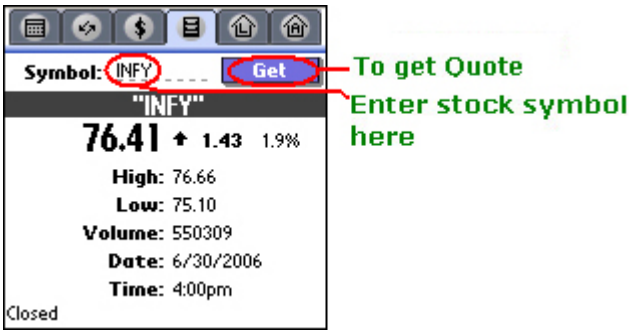
APR :- Annual Percentage Rate

Escrow (Optional): - Money placed with a third party for safekeeping either for final closing on a property or for payment of taxes and insurance throughout the year, an item of value, money, or documents deposited with a third party to be delivered upon the fulfillment of a condition. For example, the earnest money deposit is put into escrow until delivered to the seller when the transaction is closed.

Extra Principal (Optional) :- You can choose to add extra principal payments.

MxStock

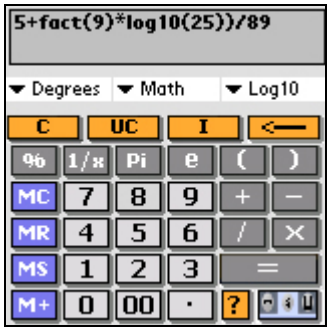
Enter the stock symbol and Tap on Find Button. To Get Quotes.



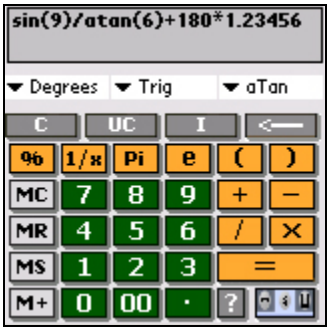
Themes

Go to the Preference menu (See Preferences below) select theme from the choices available. The theme you select would become the default theme everytime you load the program.

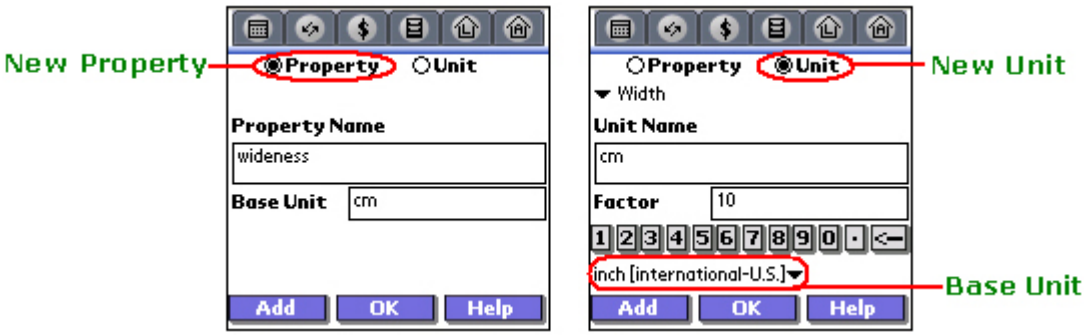
Theme 1



Theme 2



New Entry Form



This module allows you to add new Property & Unit. The items which are very rarely used can be hidden, so it does not show up in the list and hence making the list short and easy to scroll.

Following are the steps for adding new values in the database:-

1. Select an option from top of the screen.

2. (a) **New Property** - Enter the New Property name in the Edit Area next to **'Property Name'** and the Base Unit of that Property tap on '**Add**' button. The value of Base Unit will be 1. All other units added to this Property will have values with respect to this unit.

2. (b) **New Unit** - Enter the New Unit name in the Edit Area next to **'Unit Name'**. Enter Unit Value next to in the edit area next to '**Factor**' and select a Base Unit.

Settings

- To select the Preference option, from the toolbar select Option > Preference.
- Set the Startup Module you want to load when you run the program.
- You can change Theme from the list of themes available.