



2xCalc v.5.3.1 documentation

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2xCalc DESCRIPTION

Software Package

Thank you for using the 2xCalc software package. The zip file you downloaded includes:

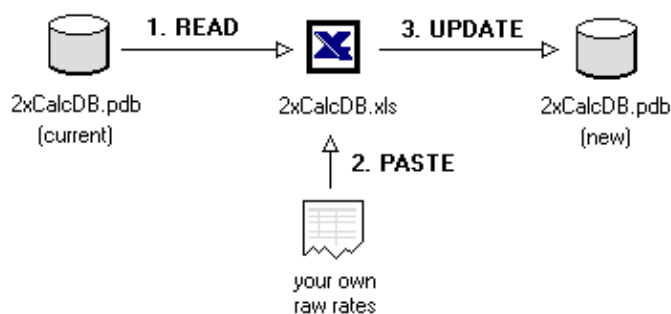
- 2xCalc.prc: program to install and launch first
- 2xCalcDB.xls: tool to update currency rate database, in Excel® format
- 2xCalc.pdf: this file in Acrobat® format
- ReadMe.html: introduction.

What's new in v.5?

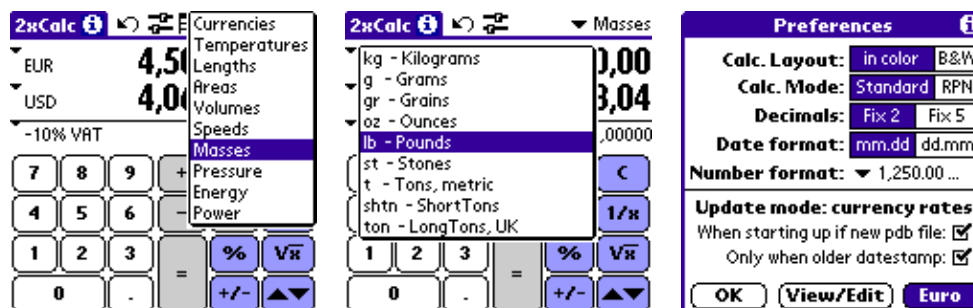
With release 5, you get extra features, such as:

- 2xCalcDB.xls support to update your own currency rates with Microsoft® Excel®
- In POWER units, mechanical (metric) HP added and kW settings fixed.

Major breakthrough: with Excel tool: 2xCalcDB.xls, you can read any previous 2xCalcDB.pdb database, cut and paste your own data to update it, and save it to install it during next HotSync. Please read "Rates Update" section below for further information.



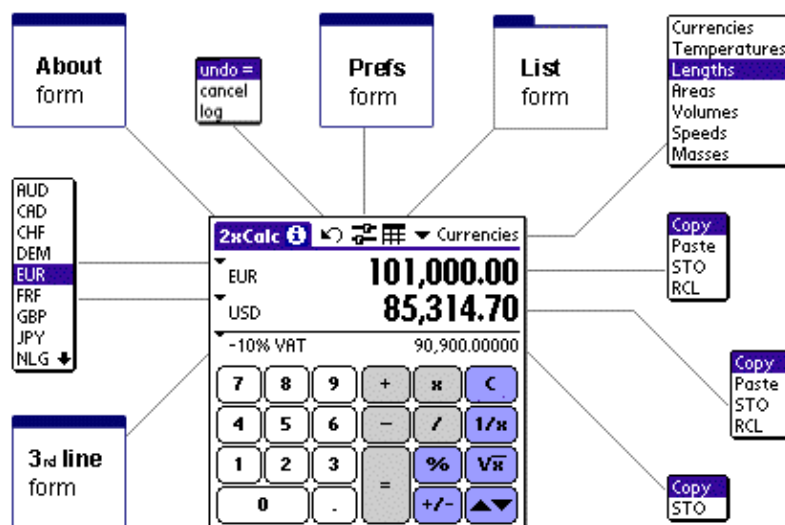
For your information, new unit conversion factors are added on a regular basis:



As always, upgrade from earlier versions of 2xCalc is free for registered users.

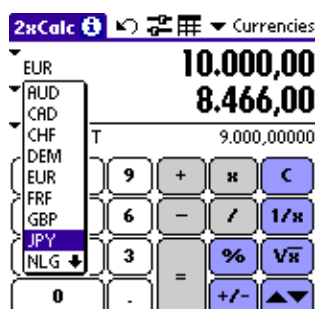
Overview

Designed for all handhelds running PalmOS®, 2xCalc is a multi-mode **calculator** and universal **converter**:

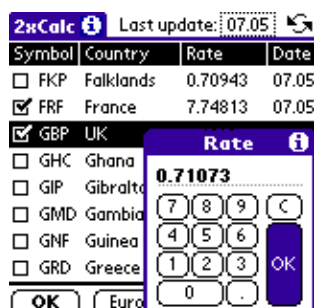


The main form is the calculator display, which uses the settings defined via multiple preference form, like the Currency List form, the Prefs and Third Line forms. C.f. next chapter for more details and forms, and the Appendix for a general and complete map.

The **Calculator** features:



- 2 twelve-digit displays for simultaneous currency calculations
- Extra display line for special calculations: VAT addition, discounts, etc.
- Automatic and instant converter for currencies, temperatures, distances, areas, volumes, speeds, and masses
- 2 calculation modes: standard and RPN (like in most HP® calculators)
- High accuracy maths: +, -, x, /, %, 1/X, sqrt...
- Copy and Paste. Values sharing with other applications
- Undo/redo and log displays for last calculations
- Etc.



The **Currencies** form features:

- 160 (20x8) simultaneous currency informations
- Individual pop-up forms to edit all currency details: currency symbol, country, rate and date
- Selection checkboxes to enable/disable currency selection from the main Calculator form triggers
- Download of new currency rates from file: 2xCalcDB.pdb
- Currency rates database is refreshed every week at: <http://www.wizu.com/2xCalcDB.html>
- Etc.

The **Prefs** form groups the major settings:

- Calculation mode: standard or RPN
- Number of displayed decimals
- Date and number formats, which are already preset according to your country default settings
- Confirmation prompt for currencies rates update
- Link to a dedicated form for the **Euro**
- Etc.

The **Third line prefs** form features:

- Custom label to be displayed in main Calculator form
- Value of multiplier or divider
- Calculation reference line
- This is very convenient for margin, discount, or tax calculations, for instance.

Disclaimer

The author makes no Warranty, Representation, Promise or Guarantee, terms or conditions, either or express or implied, with respect to the Software, Help and Technical Support, including their Quality and Performance. In no event will the author be liable for direct, indirect, special, incidental, consequential, tort (including negligence), economic, cover or punitive damages of any kind, including, without limitation, damages or costs relating to the loss of profits, business, information or data, or any other loss arising out of or in connection with this software, even if advised of the possibility of such damages.

BASIC OPERATIONS

Calculator

The Calculator form includes a user friendly keyboard for fast entry and instant conversion displays.

The following double precision Maths operations are supported : +, -, x, /, +/-, %, 1/X, and **Sqrt**, as well as **Clear** and **Sto/Rcl** Memory.

Two calculation modes are featured: standard and RPN (i.e. Reverse Polish Notation, like in most HP[®] calculators). Let's assume you want to compute $1 + 2 \times 3$ which equals 7 (and not 9 because of calculation priorities)...

- in standard mode, you just type: [1] [+] [2] [x] [3] [=]
- in RPN mode, you can type: [1] [Ent] [2] [Ent] [3] [x] [+], or: [2] [Ent] [3] [x] [1] [+]

Just toggle the calculation mode in the Prefs form to meet your needs.



Demo version is limited to 5 digits but registered version supports up to 12 digits (double precision).

Direct Copy/Paste and Sto/Rcl features by clicking on upper or lower LED-like display:



Before leaving, 2xCalc saves all calculator informations in its database for next launch.

Currencies

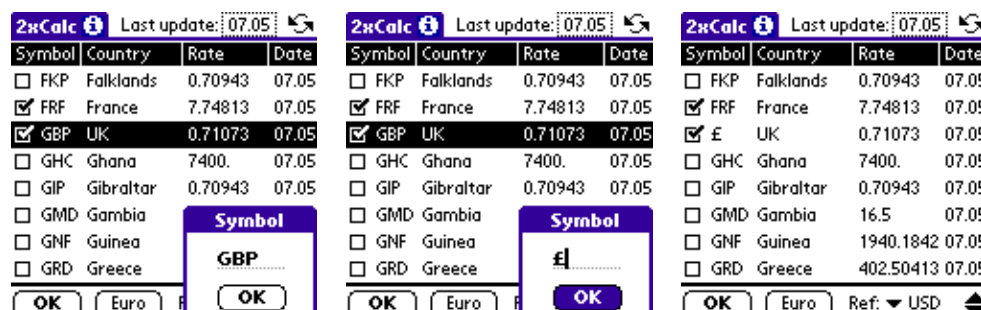
2xCalc preselects 20 lists of 8 currencies according to your Country:

- for most European countries, currency rates are **Euro** based, i.e. EUR rate is 1.0000 and others are XXX/EUR
- for other countries, currency rates are **US Dollars** based, i.e. USD rate is 1.0000 and others are XXX/USD

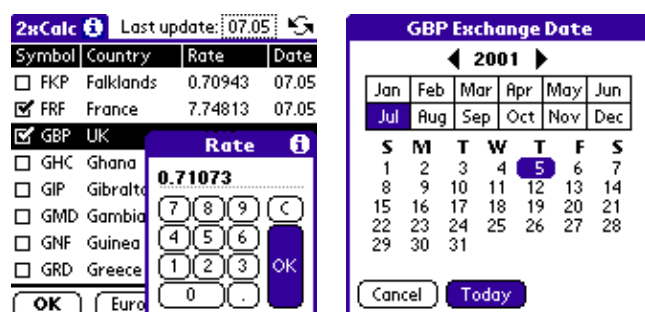
Just click on the Currency List symbol in the main form or on the View/Edit button in the Prefs form to list/edit currencies:



You can edit any information by clicking on the appropriate data field. Eg. if you want to use the British Pound character (£) instead of the official 3-letter symbol (GBP), just click and edit the field:

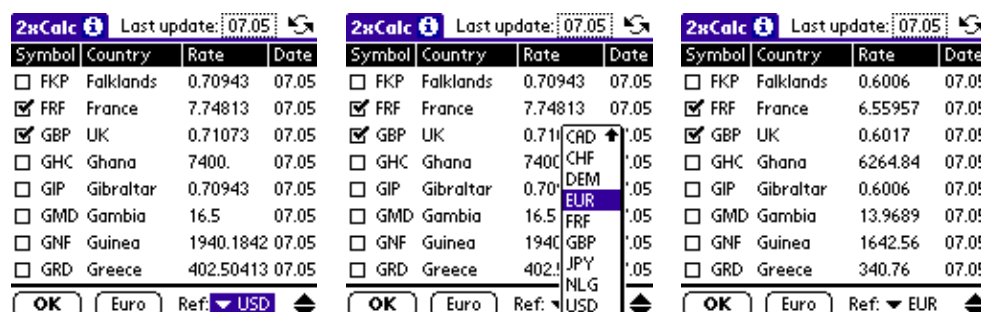


Warning: if you change any symbol, the automatic rate update will not properly detect the currency anymore. So it is a good idea only if you update the rates yourself, manually. You can also change the country information, which is only a comment and not read by the automatic updater. More often, you may need to update the rate and date fields yourself:



Uncheck any currency you do not want to appear in calculator form popup selection menus.

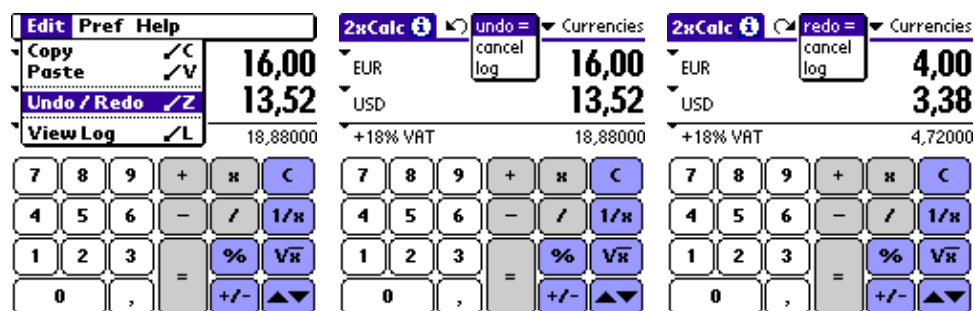
The reference currency can be changed via a simple pop-up menu, so you can set rates according to any currency.



2xCalc saves any information you change in its database.

Undo/Redo

Undo/redo last calculation via the menu or the new arrow icon on the right side of the form title.

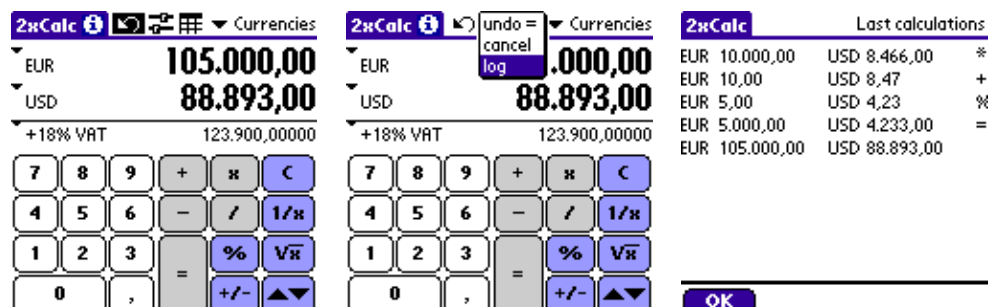


Very convenient when you made a mistake in your calculations. It works in both standard and RPN modes and appears in the log window for future reference.

Log (history)

The log (history) form displays the last 10 calculations.

Each line summarizes symbols and values for both currencies, as well as the calculation symbol (Eg. +, -, *, /, %, | as 1/x, V as sqrt of x, C as clear).

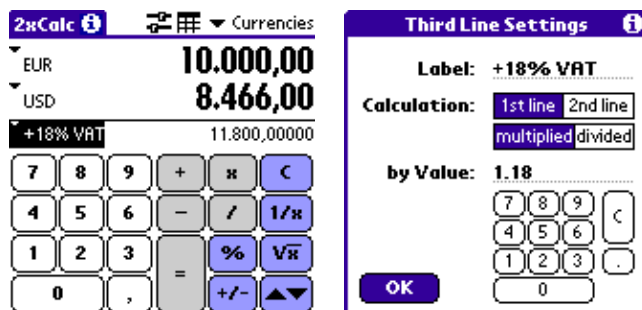


The lines scroll and the bottom line is always a snapshot of the calculator displays, even when all digits have not been entered yet.

Third display line

Designed for custom calculations with high accuracy, the third features:

- Easily customized labels, eg. VAT or discounts
- Any multiplier value (k). 3rd line = k * 2nd line, or k * 1st line
- Any divider value (k). 3rd line = 2nd line / k, or 1st line / k
- Fixed 5 digit display for decimal value
- Support for STO and Clipboard Copy functions.



RATES UPDATE

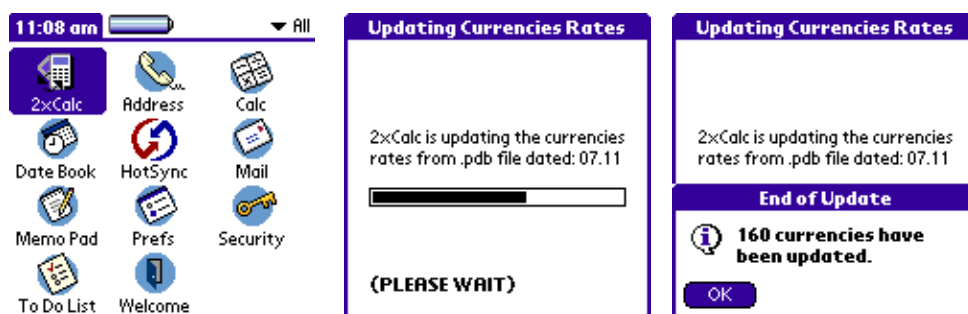
The currency rates database can be updated from the file: **2xCalcDB.pdb**

Standard procedure

Assuming 2xCalc is already installed on the Palm handheld and has been launched at least once, please follow these steps to update the rates:

- download the file: 2xCalcDB.zip from our web site:
<http://www.wizu.com/2xCalcDB.html>
and unzip it on your desktop
- install 2xCalcDB.pdb on your PDA via HotSync®
- launch 2xCalc and update will start automatically
- confirm download. That's all!

2xCalcDB.pdb contains more than 160 rates and is refreshed on a weekly basis, on my web site.



All current currencies with:

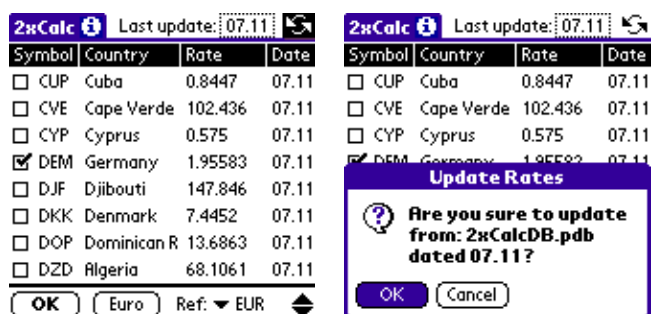
- an official 3-uppercase-letter symbol
- a time stamp older than the .pdb file

will automatically be updated.

Warning: the process just update the 'rate' and 'date' fields but not the 'country' information, which is a free, non formatted field.

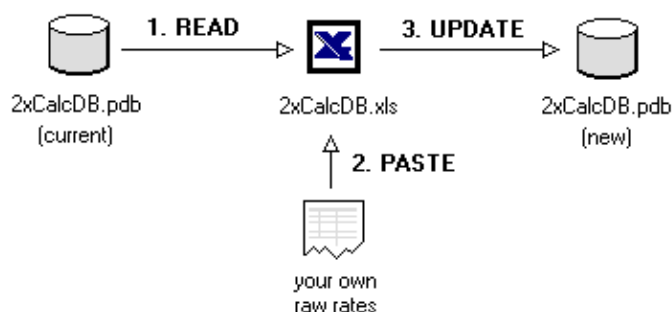
Force new update

If for any reason, like errors in manual updates, you need to reload the complete rates database, just go back to the Currency List form and click on the UPDATE icon to force a new procedure:



NEW: Manual update in Excel®

With Excel® tool: 2xCalcDB.xls, you can update rates in 3 steps:



In other words:

- read any previous 2xCalcDB.pdb database
- cut and paste your own raw data (Euro based rates) and set the date
- update and save 2xCalcDB.pdb.

The spreadsheet automatically detects the environment (MacOS 9 or X, and Windows) and groups key commands (READ, PASTE, UPDATE, WRITE) in the top of the window. It is quite self-explanatory:

2xCalcDB.xls v.5.3.1

Update 2xCalcDB.pdb in 3 steps

1. Read current PDB / Euro **2. Paste raw rates / Euro** **3. Update and save new PDB**

READ Date: 11/15/2002 11 18 2002 UPDATE WRITE

month / day / year month / day / year

just paste your raw data here

ADF Andorra/F	7.4987	AUD 1.7928	ADF 7.4987
ADP Andorra/P	186.986	CAD 1.5992	ADP 186.986
AED UAE	3.6894	CHF 1.4665	AED 3.6894
AFA Afghanistan	4747.1	DEM 1.95583	AFA 4747.1
ALL Albania	141.942	EUR 1	ALL 141.942
ANG NL Antilla	1.7878	FRF 6.55957	ANG 1.7878
AON Angola	31.7075	GBP 0.6392	AON 31.7075
ARS Argentina	3.5656	ITL 1936.27	ARS 3.5656
ATS Austria	13.7603	JPY 121.61	ATS 13.7603
AUD Australia	1.7837	MXN 10.3373	AUD 1.7928 Updated
AWG Aruba	1.7888	USD 1.0097	AWG 1.7888
BBD Barbados	1.9988		BBD 1.9988
BDT Bangladesh	60.4468		BDT 60.4468
BEF Belgium	40.3399		BEF 40.3399
BGL Bulgaria	1.9433		BGL 1.9433
BHD Bahrain	0.3796		BHD 0.3796
BIF Burundi	1059.14		BIF 1059.14
BMD Bermuda	1.0034		BMD 1.0034
BND Brunei	1.7747		BND 1.7747
BOB Bolivia	7.7119		BOB 7.7119
BRL Brazil	3.7113		BRL 3.7113
BSD Bahamas	0.9944		BSD 0.9944
BTN Bhutan	48.2373		BTN 48.2373
BWP Botswana	5.9502		BWP 5.9502
BZD Belize	1.9787		BZD 1.9787
CAD Canada	1.5823		CAD 1.5992 Updated

Prêt Somme=1.0097 DEF MAJ

How are currency rates updated?

As raw data, the currency rates you paste, in the central zone, should appear with two columns and should comply with the following rules:

- The first column should list official currency symbols, i.e. EUR as Euro, USD as US Dollar, DEM as Deutsche Mark, GBP as UK Sterling Pound, FRF as French Franc.
See the Appendix for all symbols.
- The second column should list the respective values, based on the Euro currency. So the value of EUR is always 1 and if 1 Euro = USD 0.88412, then the value of USD must be 0.88412

All or part of the currencies can be updated. If you just paste a few raw rates, the final 2xCalcDB.pdb file will include two dates: the new one which has to be set on top of the white zone (date for all updated currencies) and the initial date which was read in the current pdb file and which is displayed on the left side (date for unchanged currencies).

Once you updated and saved the 2xCalcDB.pdb file, you can exit Excel and double-click on the file or its icon, to put it in the installation queue for next HotSync.

After the HotSync, you can run 2xCalc which will automatically detect the new pdb file and start the rates update. Then you can display the currency list and check the new values and dates for each of the 160 currencies.

Warning: the raw rates you cut from your own source and paste into 2xCalcDB.xls must be Euro (EUR) based and not Dollar (USD) based. The reason of choice is simple: the easiest support of the 12 former Euroland currencies (DEM, FRF, etc.) which stay in many people's mind for quite a while, even if they are already replaced by the Euro.

Next version will support Dollar-based rates too.

USEFUL TIPS

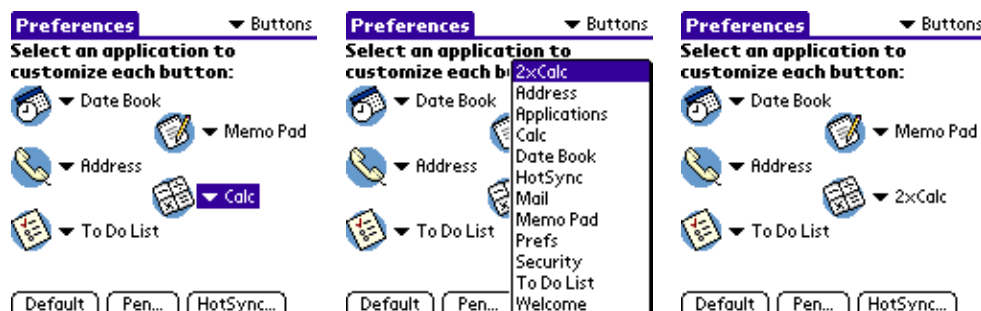
Installation

Install 2xCalc like any other application, with the Desktop install tool. You do not need to delete the previous version if it already exists: Upgrade will also take care of registration informations.

Default calculator

To install 2xCalc as your default calculator, you just need to:

- launch the "Prefs" application
- select the "Buttons" trigger
- replace the "Calc" settings by "2xCalc", from the list.



Undo manual update

If you need to undo manual currency rate settings, just download again the "inboard" 2xCalcDB file via the popup menus.

You don't even need to re-install the .pdb file from the desktop: the previously downloaded database remains write-protected.

SUPPORT

2xCalc is a shareware at \$14.50. Thanks to your support, 2xCalc will continue to be enhanced on a regular basis, via **free** upgrades for registered users.

Demo version features:

- Unlimited set of functions and operations and unlimited evaluation period
- 5 digit inputs: **XXX.XX** limitation, with warning message when you attempt to enter more digits

The demo and full versions share the same file: "2xCalc.prc". The only difference is the number of digits you can type in the Calculator form. To unlock the 5 digit limitation and transform your demo into the full version, please register.

Registration

Registration is fast and easy. Just go to the following web page for details: www.palmgear.com

After your online registration, you will receive an e-mail detailing a few steps which will unlock the demo limitation (currently set to 5 digit entries). These steps depend on your UserName, i.e. the name you use to HotSync® your Palm with your desktop computer.

You won't have to download any other file again. You will just enter your code via the Registration form, and the code will turn your demo into the full version:



Tech Support

To download new releases or more information, please go to our web site: www.wizu.com

Feel free to contact us for any comment or question, just send an e-mail to: support@wizu.com

Thank you in advance for your cooperation and support.

About 2xCalc

2xCalc is a registered application for PalmOS®, Creator Id: 2xCc, January 1999.
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HotSync is a registered trademark, and PalmOS is a trademark, of Palm, Inc.
Excel is a registered trademark of Microsoft Corp.

Other product and brand names may be trademarks or registered trademarks of their respective owners.

APPENDIX

Conversion Units

Symbol	Temperature Unit	Symbol	Length Unit
°F	degrees Farenheit	m	meters
°C	degrees Celcius	cm	centimeters
K	Kelvins	mm	millimeters
		in	inches
		ft	feet
		yd	yards
		mi	miles
		nmi	nautical miles
		km	kilometers

Symbol	Area Unit	Symbol	Volume Unit
m ²	square meters	L	liters
cm ²	square centimeters	m ³	cubic meters
in ²	square inches	ft ³	cubic feet
ft ²	square feet	gal	gallons (US)
yd ²	square yards	GAL	imperial gallons (UK)
ac	acres	fl.oz	fluid ounces (US)
ha	hectares	FL.OZ	imperial fluid ounces (UK)
mi ²	square miles		
km ²	square kilometers		
tsb	tsubo (Japan)		

Symbol	Speed Unit	Symbol	Volume Unit
m/s	meters per second	kg	kilograms
ft/s	feet per second	g	grams
in/s	inches per second	gr	grains
km/h	kilometers per hour	oz	ounces
mph	miles per hour	lb	pounds
kn	knots (nautical miles per hour)	st	stones
		t	tons (metric)
		shtn	short tons (US)
		ton	long tons (UK)

Symbol	Pressure Unit	Symbol	Energy Unit
bar	bar	J	Joule
mbar	millibar	cal	calory
Pa	Pascal	kWh	kilo Watt hour
hPa	hectoPascal	btu	British thermal unit
atm	atmosphere		
psi	pound / sq.inch		
mmHg	millimeter of mercury		
inHg	inch of mercury		

Symbol	Power Unit
W	Watt
J/s	Joule/s
kW	kilo Watt
cal/s	calory/s
hp	horse power (elec.)
hp(m)	horse power (mech.)
btu/h	British thermal unit / h

Official Currency Symbols

Symbol	Currency	Symbol	Currency
ADF	Andorran Franc	ADP	Andorran Peseta
AED	Utd. Arab Emir. Dirham	AFA	Afghanistan Afghani
ALL	Albanian Lek	ANG	NL Antillian Guilder
AON	Angolan New Kwanza	ARS	Argentine Peso
ATS	Austrian Schilling	AUD	Australian Dollar
AWG	Aruban Florin	BBD	Barbados Dollar
BDT	Bangladeshi Taka	BEF	Belgian Franc
BGL	Bulgarian Lev	BHD	Bahraini Dinar
BIF	Burundi Franc	BMD	Bermudian Dollar
BND	Brunei Dollar	BOB	Bolivian Boliviano
BRL	Brazilian Real	BSD	Bahamian Dollar
BTN	Bhutan Ngultrum	BWP	Botswana Pula
BZD	Belize Dollar	CAD	Canadian Dollar
CHF	Swiss Franc	CLP	Chilean Peso
CNY	Chinese Yuan Renminbi	COP	Colombian Peso
CRC	Costa Rican Colon	CZK	Czech Koruna
CUP	Cuban Peso	CVE	Cape Verde Escudo
CYP	Cyprus Pound	DEM	German Mark
DJF	Djibouti Franc	DKK	Danish Krone
DOP	Dominican R. Peso	DZD	Algerian Dinar
ECS	Ecuador Sucre	EEK	Estonian Kroon
EGP	Egyptian Pound	ESP	Spanish Peseta
ETB	Ethiopian Birr	EUR	Euro
FIM	Finnish Markka	FJD	Fiji Dollar
FKP	Falkland Islands Pound	FRF	French Franc
GBP	British Pound	GHC	Ghanaian Cedi
GIP	Gibraltar Pound	GMD	Gambian Dalasi
GNF	Guinea Franc	GRD	Greek Drachma
GTQ	Guatemalan Quetzal	GYD	Guyanese Dollar
HKD	Hong Kong Dollar	HNL	Honduran Lempira
HRK	Croatian Kuna	HTG	Haitian Gourde
HUF	Hungarian Forint	IDR	Indonesian Rupiah
IEP	Irish Punt	ILS	Israeli New Shekel
INR	Indian Rupee	IQD	Iraqi Dinar
IRR	Iranian Rial	ISK	Iceland Krona
ITL	Italian Lira	JMD	Jamaican Dollar
JOD	Jordanian Dinar	JPY	Japanese Yen
KES	Kenyan Shilling	KHR	Cambodian Riel
KMF	Comoros Franc	KPW	North Korean Won
KRW	South-Korean Won	KWD	Kuwaiti Dinar
KYD	Cayman Islands Dollar	KZT	Kazakhstan Tenge
LAK	Lao Kip	LBP	Lebanese Pound

LKR	Sri Lanka Rupee	LRD	Liberian Dollar
LSL	Lesotho Loti	LTL	Lithuanian Litas
LUF	Luxembourg Franc	LVL	Latvian Lats
LYD	Libyan Dinar	MAD	Moroccan Dirham
MGF	Malagasy Franc	MMK	Myanmar Kyat
MNT	Mongolian Tugrik	MOP	Macau Pataca
MRO	Mauritanian Ouguiya	MTL	Maltese Lira
MUR	Mauritius Rupee	MVR	Maldives Rufiyaa
MWK	Malawi Kwacha (<i>deleted</i>)	MXN	Mexican Peso
MYR	Malaysian Ringgit	MZM	Mozambique Metical
NAD	Namibia Dollar	NGN	Nigerian Naira
NIO	Nicaraguan Cordoba Oro	NLG	Dutch Guilder
NOK	Norwegian Kroner	NPR	Nepalese Rupee
NZD	New Zealand Dollar	OMR	Omani Rial
PAB	Panamanian Balboa	PEN	Peruvian Nuevo Sol
PGK	Papua New Guinea Kina	PHP	Philippine Peso
PKR	Pakistan Rupee	PLN	Polish (New) Zloty
PTE	Portuguese Escudo	PYG	Paraguay Guarani
QAR	Qatari Rial	ROL	Romanian Leu
RUB	Russian Rouble	SAR	Saudi Riyal
SBD	Solomon Islands Dollar	SCR	Seychelles Rupee
SDD	Sudanese Dinar	SDP	Sudanese Pound
SEK	Swedish Krona	SGD	Singapore Dollar
SHP	St. Helena Pound	SIT	Slovenian Tolar
SKK	Slovak Koruna	SLL	Sierra Leone Leone
SOS	Somali Shilling	SRG	Suriname Guilder
STD	Sao Tome/Principe Dobra	SVC	El Salvador Colon
SYP	Syrian Pound	SZL	Swaziland Lilangeni
THB	Thai Baht	TND	Tunisian Dinar
TOP	Tonga Pa'anga	TRL	Turkish Lira
TTD	Trinidad/Tobago Dollar	TWD	Taiwan Dollar
TZS	Tanzanian Shilling	UAH	Ukraine Hryvnia
UGS	Uganda Shilling	USD	US Dollar
UYP	Uruguayan Peso	VEB	Venezuelan Bolivar
VND	Vietnamese Dong	VUV	Vanuatu Vatu
WST	Samoa Tala	YUN	Yugoslav Dinar
ZAR	South African Rand	ZMK	Zambian Kwacha
ZWD	Zimbabwe Dollar	CFP	Pacific Francs