CONVERTER PRO V-2.0x
USER'S MANUAL

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1 WHAT IS CONVERTER PRO?

CONVERTER PRO is a program to convert units in a professional manner.

CONVERTER PRO comes with a database that contains the most important conversion factors to convert length, area, volume, mass, force, pressure, density, energy, power, temperature, dynamic viscosity, kinematic viscosity and time units. The database contains all commonly used unit systems (British, US, SI, CGS and MKS).

Units that are not available in the database can be composed from up to four available units (for example 'mile' and 'hr.' will give 'mile/hr.' or 'BTU', lb. and deg. F will give 'BTU/lb. deg.F').

All conversion factor tables contained in the database are extendible. If you miss a unit that you use frequently, you can simply add it yourself.

You may also enter up to ten user-defined conversion factor tables (for example electrical or acoustical units)

You can rely on the accuracy of the conversions. The database was established using the most accurate basic conversion factors available and carefully tested. At least five digits of the results will therefore always be accurate.

CONVERTER PRO has been written by an engineer who is working internationally. He got fed up for good one day to continue with re-inventing the wheel over and over again and wrote this program. The program is therefore particularly suitable for all those who work under similar circumstances and are frequently confronted with unfamiliar unit systems.

2 ABOUT SHAREWARE/LICENSING

The shareware version is 100% functional. It differs from the license-version only by registration reminder screens at program start and end. These are there to remind you that you may use this software on a trial basis only and that you must obtain a licensed copy if you want to use it regularly.

The license version may be installed on as many computers as desired, as long as it is ONLY running once at a time (i.e. one installation at home and one at the office used by

the same person). The usage by several persons at the same time (on several computers) requires additional licences.

Additional licences allow an institution, company or school to install the program on multiple computers or on a file server. It must be guaranteed that the program does not run on more machines at the same time than there are licences available. All licences are issued to the same (company) name, which appears in the program's title bar. Additional licences also allow the usage of the program at home, as long as the main use is at the company.

The shareware concept allows you to evaluate the software in detail. You can then decide whether it fits your needs or not and whether you like it or not - before an eventual purchase.

You may obtain a licensed copy of the software against payment of a license fee. As a registered user, you will be entitled to the following additional benefits:

- You will receive the latest program version.
- You will be entitled to free advice and support if you should have a problem with the software. Contact telephone no. +41 1 926 27 50 in Switzerland or send electronic mail to CompuServe user ID 100273,403 (equivalent to 100273.403@compuserve.com for Internet users) or send a fax to +41 1 926 27 50.
- If you discover a bug in the software, you will be entitled to a free program update.
- You will entitled to purchase new program versions with large discounts (normally about 60%). If you have Internet access you can visit http://ourworld.compuserve.com/homepages/accsoft_ch to check for new program versions.

3 REGISTRATION

You will receive the licensed software against pre-payment of a license-fee to the program author as follows:

For a single license: Swiss Francs 36.- (One 3.5" diskette)

For a multiple license:

2nd to10th license:	Swiss Francs 24.- per license (Without diskette)
11th to 25th license:	Swiss Francs 18.- per license (Without diskette)
26th to 100th license:	Swiss Francs 15.- per license (Without diskette)

Add 17.7% to the above fees if you wish to order by CompuServe SWREG (GO SWREG, no. 12221)

Multiply by 0.694 to convert Swiss Francs to US dollars.

Credit card payments (Visa, Eurocard/Mastercard and Amexco) are accepted.

a) On-line registration:

Internet: You can purchase and immediately receive the registered version of this program on the Internet from Albert's Ambry. Transactions are via credit card with the option of making the purchase over a secure server. Registration at Albert's Ambry also eliminates

shipping and handling costs. Please go to: http://www.alberts.com
Search on: Converter Pro
Click on the "Buy It" hotlink to register the software.

CompuServe: GO SWREG, program ID 12221. The software will be e-mailed to your CompuServe address.

b) Registration by fax or mail:

If you do not have Internet access you must order by fax or by mail. The file ORDER.WRI contains an order form that you may process with and print from Windows Write .

Fax the order form to

+41 1 926 27 50

or mail it to

AccSoft, Willy R. Aus der Au
Seestrasse 80
CH-8712 Staefa
Switzerland

Please do not forget to indicate your complete address, and allow up to two weeks for delivery.

4 CONVERSIONS - DATA ENTRY

The units are entered in a display of an equation with two mathematical fractions. Above and below the fraction-lines you can enter up to two units. You can thus compose units from the ones available in the database. For example, you can compose ‘mile’ and ‘hr.’ to give ‘mile/hr.’ or ‘BTU’, ‘lb.’ and ‘deg. F’ to give ‘BTU/lb. deg.F’.

To enter units, click first on the right one of the double combo boxes and choose the unit type. Then, click on the left one and choose the unit.

You can replace the default value (1) at the beginning of the equation.

A list that will appear in the lower half of the screen records all of your conversions during a CONVERTER PRO session.

With the command buttons ‘Copy result to clipboard’ and ‘Copy marked cells to clipboard’ you can easily transfer the conversion results to other applications (for example to a spreadsheet).

If you want to copy results to the Windows calculator, you must first display the calculator in its scientific form. If you display the calculator in its standard form, the paste function will (unfortunately) not work properly.

5 CONVERSIONS - ACCURACY

The database has been established using the most accurate basic conversion factors available. At least five digits of the results will therefore always be accurate.

The database has also been tested using a suitable algorithm. Therefore, you can rely on its accuracy.

6 DATABASE

6.1 User-defined data

You can add up to ten user-defined conversion tables.

You must initialize each user-defined table by giving it a DOS-compatible file name. For this purpose, select ‘Options’/’Custom file name management’ from the main menu and name your files.

Call up the initialized tables under 'File'/'Database'/'Other/Custom' and enter your own conversion factors.

You can delete a user-defined conversion table by deleting its file name from the file list of the custom file name management form (‘Options’/’Custom file name management’).

6.2 Database - data input and modification

Adding a unit:

Click on the ‘Add a unit’ button and enter the unit in the unit entry form. Use the buttons ‘To the power of 2’, ‘To the power of 3’ and 'µ' to for a better presentation of some units (for example µA instead of microampere). Then, click on ‘OK’. CONVERTER PRO will automatically insert your entry at the appropriate places of the alphabetically sorted line and column headers.

Editing a unit:

Click on the unit to be edited (either in the column header or in the line header) and edit the unit in the unit entry form. Then, click on ‘OK’.

Deleting a unit:

Click on the ‘Delete a unit’ button and confirm your intention by clicking on ‘OK’ twice. Then, click on the unit to be deleted (either in the column header or in the line header).

Entering a factor:

Click on the appropriate field of the table and enter the factor in the factor entry form. Then, click on ‘OK’.

Editing a factor:

Click on the appropriate field of the table and edit the factor in the factor entry form. Then, click on ‘OK’.

6.3 Database - basic conversion factors used

The database has been established using the following basic conversion factors:

Length:

1 inch = 2.54 cm (exactly). This has been agreed internationally and is valid at 20 deg. C.

Area:

1 inch = 2.54 cm (exactly). This has been agreed internationally and is valid at 20 deg. C.

Volume:

1 inch = 2.54 cm (exactly). This has been agreed internationally and is valid at 20 deg. C.
1 gallon (GB) = imperial gallon = 4.5459631 liter
1 US gallon = 231 cubic inch, according to the US standard
1 petroleum barrel = 5.6065 cubic feet (exactly). A petroleum barrel is thus neither equivalent to exactly 159 liter, nor exactly 35 British gallons, nor exactly 42 US gallons !

Mass:

1 pound mass = 0.45359237 kg, according to an international agreement.

Force:

1 pound force = 0.45359237 kp (the same value as the one for mass)
1 kp = 9.80665 Newton (terrestrial gravity has internationally been agreed to be exactly 9.80665 meters per square second)

Pressure:

1 atm (atmosphere) = 760 Torr (millimeter mercury) = 1.03323 at (kilopond per square centimeter)

Density:

See under ‘Mass’ and ‘Volume’

Energy:

1 J (Joule) = 1 Newtonmeter = 4.1868 cal (calories) exactly, according to an international agreement.
1 cal/g =1 .8 BTU/pound mass (exactly, according to an international agreement)

Power:

1 PS (Pferdestärke) = 75 Kilopondmeter per second, exactly)
1 H.P. (horse power) = 550 lb.ft./sec. (pound foot per second)

Temperature:

1 degree Fahrenheit = 5/9 degree Celsius
1 degree Réaumur = 4/5 degree Celsius

Dynamic viscosity:

See under ‘Length’, ‘Mass’ and ‘Force’

Kinematic viscosity:

See under ‘Length’ and ‘Pressure’

Time:

1 a (year) = 365 d (day), as usual in the technical field