

CONVERTER PRO V-3.0x
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 works internationally. He got fed up for good one day to continue 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

This program is 100% functional. However, it is provided on a trial basis only and it is therefore time-limited. You may test this program during 30 days. If you want to continue using it after the end of the trial period, you must obtain a license.

This 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.

A single license entitles you to install and use the program on one PC. Additional licenses allow an institution, company or school to install the program on additional PCs or on a file server. If installed on a file server, it must be guaranteed that the program does not run on more client PCs at the same time than there are licenses available. All licenses are issued to the same (company) name, which will appear in the program's title bar.

You can register this program 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 **accsoft@accsoft-ch.com** 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 be entitled to get new program versions for free if you get them yourself. The unlock code will (until further notice) also be valid for future program updates. If you have Internet access you can visit <http://www.accsoft-ch.com> and download new program versions.

Registration

You will receive the unlock code by e-mail (if you order on-line) or by mail with two 3.5 inch diskettes containing the latest version of the software (if you order by fax or by mail) against pre-payment of a license-fee to the program author as follows:

For a single license: Swiss Francs 36.- (Unlock code by e-mail or by mail with two 3.5 inch diskettes)

For a multiple license:

2nd to 10th license:	Swiss Francs 24.- per license (without diskettes)
11th to 25th license:	Swiss Francs 18.- per license (without diskettes)
26th to 100th license:	Swiss Francs 15.- per license (without diskettes)

Multiply by 0.9644 to convert Swiss Francs to US dollars.

On-line registration

Internet: You can purchase a license for this program on the Internet. Transactions are via credit card over a secure server. Please go to <http://www.accsoft-ch.com/albcon.htm> for online purchasing.

CompuServe: GO SWREG, search on Converter Pro. The unlock code will be e-mailed to your CompuServe address.

Registration by fax or mail

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

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.

3. 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.

4. 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.

5. 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'. CONVERTER PRO will always automatically enter data into all empty fields of the table.

Editing a factor:

Click on the appropriate field of the table and edit the factor in the factor entry form. Then, click on 'OK'. CONVERTER PRO will always automatically change all data that had automatically been entered when the unit was first entered (see 'Entering a factor').

6. Database - 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').

7. 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 deg. Fahrenheit = 5/9 deg. Celsius

1 deg. Réaumur = 4/5 deg. 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