

Units Conversion Menu

This menu adds a powerful physical units conversion calculation. To show it, touch the “**OPT**” menu and in the “3) Conversions:”, touch the “**Units Conv.**” button.

Selected Category Name

Opens the Unit Editor

Energy ▶		Edit
kWh	+1,699.81	
Kilowatt-hours		
MMBtu	+5.80	
Millions B		
BOE	+1.00	
Oil Barrel		
BTU	+5,800,000.00	
British Thermal Units		
cal	+1,461,596,360.22	

Units Equivalent table for the selected category

Touch the Category name to display a list with all units categories available. Select the desire category from the list and all the available units in that category will be shown in the Units Equivalent table.

Simply type a value with the calculator keypad, then touch the unit row in the list to assign that value to that unit. The **Units Conversion** tool will calculate all the other units equivalent values automatically.

Optionally, units arithmetics can be performed using **[STO] [+]** or **[STO] [-]** functions (see the example below).

Touching the **[Edit]** button, the “**Units Editor**” view will be shown. There, you can fully edit the categories and units listing at your preference.

Example: Units Conversion and Arithmetic

Add 11.36 feet plus 5.75 inches plus 2 meters plus 25 centimeters and minus 0.1 chains, what is the total length expressed in yards?

Solution:

With the “Unit Conversion” menu in place, select the “**Length**” category. Then follow the next sequence:

Keystrokes	Description
Type “11.36” touch the “ ft ” unit	Enters 11.36 feet.
Type “5.75” [STO] [+] & touch the “ in ” unit	Adds 5.75 inches to the conversion.
Type “2” [STO] [+] & touch the “ m ” unit	Adds 2 meters to the conversion.
Type “25” [STO] [+] & touch the “ cm ” unit	Adds 25 centimeters to the conversion.
Type “0.1” [STO] [-] & touch the “ ch ” unit	Subtract 0.1 chains from the conversion.
Touch the “ yd ” unit	Recalls and display the total conversion value in yards. Result = 4.21 (yds)

Units Editor View

This view adds a convenient editor to customize the “Unit Conversion” menu units. To show it, touch the [Edit] button.

The image shows a mobile application interface for editing units. A modal window is open for editing the 'km' unit. The modal contains a 'Symbol' field with 'km', a 'Conversion Equation' field with the formula $S.I. = Kn \cdot (Unit - Co) / Kd + Cn / Cd$, and input fields for 'Kn', 'Kd', 'Cn', 'Cd', and 'Co'. Below the modal is a list of units: 'in', 'km', 'ld', 'ldy', 'lhr', 'lmin', 'lsec', and 'lvr'. At the bottom of the modal are 'Cancel', 'Action', and 'Done' buttons. Callout boxes point to various elements: 'Select a Unit category to edit' points to the 'Category' dropdown; 'Selected Unit input data view' points to the 'km' unit in the list; 'Insert a new Unit to the list' points to the green '+' button; 'Shows unit input data view' points to the 'i' button; 'Remove unit from the list' points to the red '-' button; 'Shows the Action Menu to create, rename, delete, reset, etc...' points to the 'Action' button; 'Close the editor and discard all changes' points to the 'Cancel' button; 'Close the editor and updates the Units Database' points to the 'Done' button; 'Select Next Unit in the list' points to the upward arrow; 'Select Previous Unit in the list' points to the downward arrow; 'Conversion Equation' points to the formula field; 'Ordering Control' points to the hamburger menu icon next to 'lhr'.

Select a Unit category to edit

Category ▶ Length Units (30)

Symbol km

Kilometers

S.I. = $Kn \cdot (Unit - Co) / Kd + Cn / Cd$

Kn : 1000

Kd : 1

Cn : 0

Cd : 1

Co : 0

Cancel Save

in Inches

km Kilometers

ld Earth to Moon Distance

ldy Light-Day

lhr Light-Hour

lmin Light-Minute

lsec Light-Second

lvr

Cancel Action ▶ Done

Select Next Unit in the list

Select Previous Unit in the list

Conversion Equation

Remove unit from the list

Shows unit input data view

Ordering Control

Close the editor and discard all changes

Close the editor and updates the Units Database

Shows the Action Menu to create, rename, delete, reset, etc...

The editor has three areas: the data listing, the keypad to enter numbers and the actions buttons.

Unit Listing:

- Shows the units contained in the selected Category.
- Touch a Unit in the list to show the edition buttons to Insert, Delete or Edit.
- Touch the “Ordering Control” and drag up or down to re-order the unit in the list.

Input Data View:

- Touch any of the fields to edit it. The coefficients K_n , K_d , C_n , C_d and C_o correspond to the conversion equation to get a S.I. system value.
- A number in edition is actually entered in the list when the **[INPUT]** key is pressed

[Action ►] Button:

New Unit	Creates a new unit in the current Category at the end of the list and shows the Unit Input view.
New Category	Ask for the new category name and creates it.
Rename Category	Ask for a new name for the current Category.
Delete Category	Removes the current category from the unit database.
Reset Category	Reset the current category to the factory default. All reordering, deletion, addition or edition previously done will be lost. If the category is a custom one, not originally present in the DataBase
Reset All Units	Resets all units and categories to factory default. All custom edition will be lost.