

WyrMConvert V2.0.1 – Installation and Help

1. Installation

Installation is a simple process, just run the downloaded installation file (WyrMConvertSetup.msi) or run it immediately on selecting the download link.

All this does is put the WyrMConvert application into the Program Files folder and creates a shortcut to it under 'WyrM Software' in your Programs menu.

2. Using It

There is nothing to setup. Once you've installed WyrMConvert you can run it.

2.1. Starting WyrMConvert

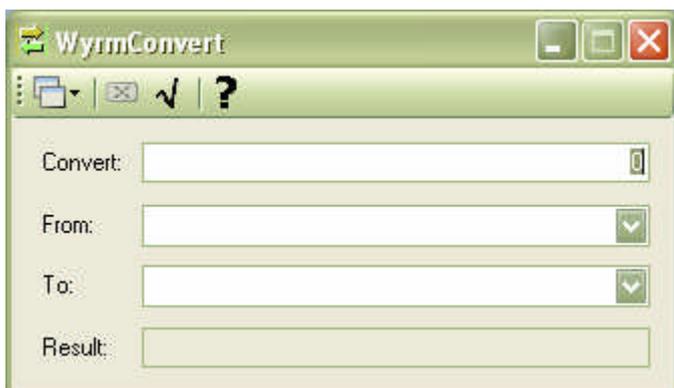
When you run WyrMConvert it will show you the main conversion window that you can use to convert between some of the more popular units.



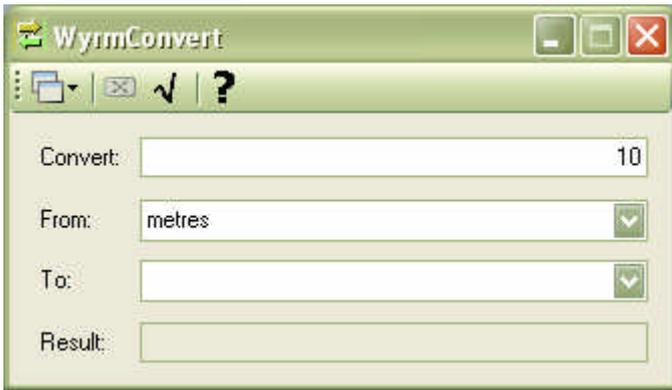
You can set your own conversions on the bottom six buttons, but more of that later. To convert simply type in the number and press the most appropriate button.

2.2. Manual Conversion

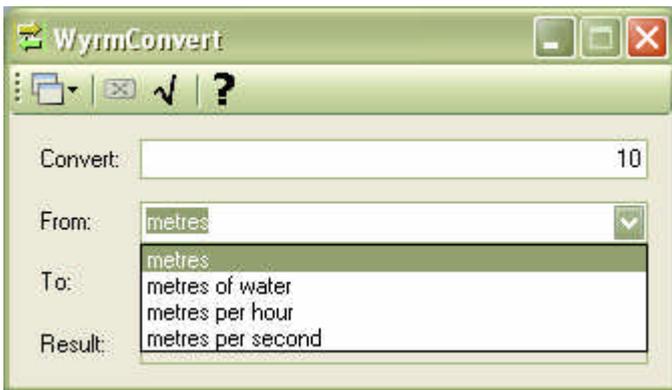
If you want access to all the units, you can switch to Manual mode. Drop down the left most tool bar button and select Manual Mode.



All you need to do here is enter the number, then in the From box start typing the unit you want to convert from.



As you type the units change, and you can drop down the list to see all the units that start with what you've typed.



Click in the To box and start typing, then drop down the list to see all the units you can convert to.

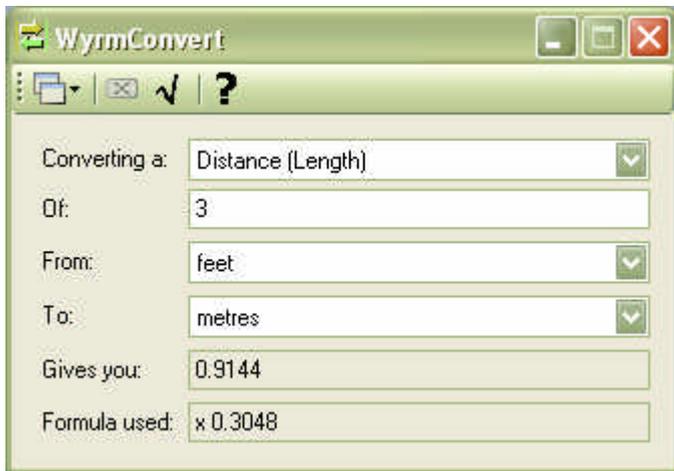


Selecting a unit will do the conversion for you.



2.3 Classic Conversion

If you select Classic Mode then you will get the original WyrMConvert user interface.



To convert, you first need to select the conversion category. As it's obviously not possible to convert between all units (e.g. you can't convert from pounds to metres), there is a drop-down list of categories that limit what units can be converted between. To select a category simply click on the down-arrow symbol at the right hand side of the conversion category box and then click on the desired category from the list.

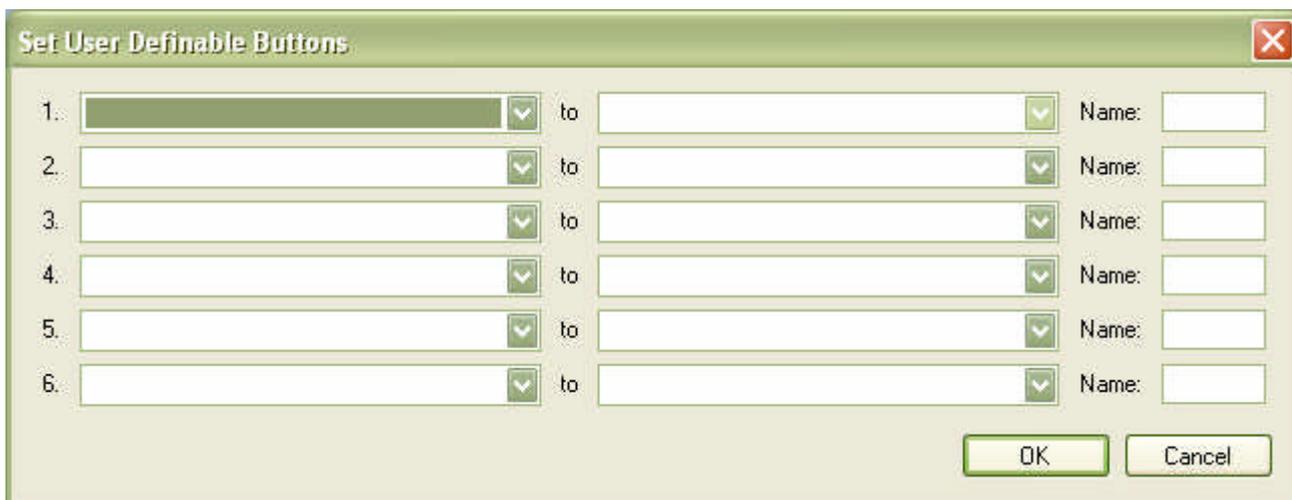
The available categories are shown below.

Then you should enter the value you want to convert in the 'Converting' box. Next you select what you are converting from by picking the relevant units from the 'From' drop down box. Finally you select what you want to convert to from the 'To' drop down box. The converted value will be shown in the 'Gives you' box - you can highlight that value and copy it to the clipboard. Below that is given the 'Conversion Factor' in case you are interested (i.e. the multiplier used in the conversion).

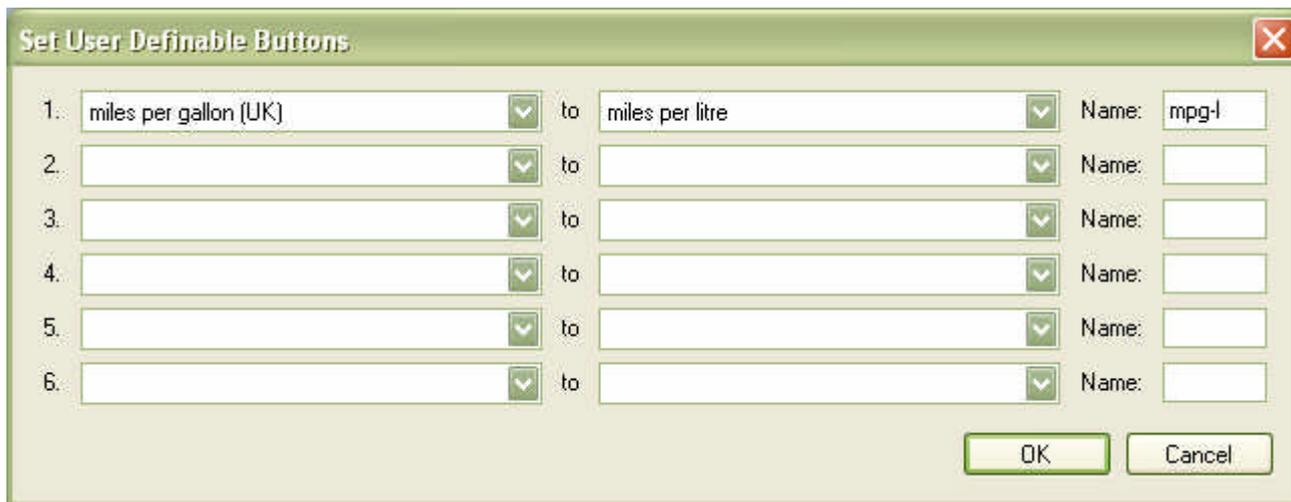
The available conversions are also shown below.

2.4. Setting User Defined Buttons

Click on the second tool bar button when in Simple mode. This will allow you to define the bottom six buttons.



Simply select the units to convert from, and to, and the name you want to show on the button.



Then click OK to go back to the conversion screen.

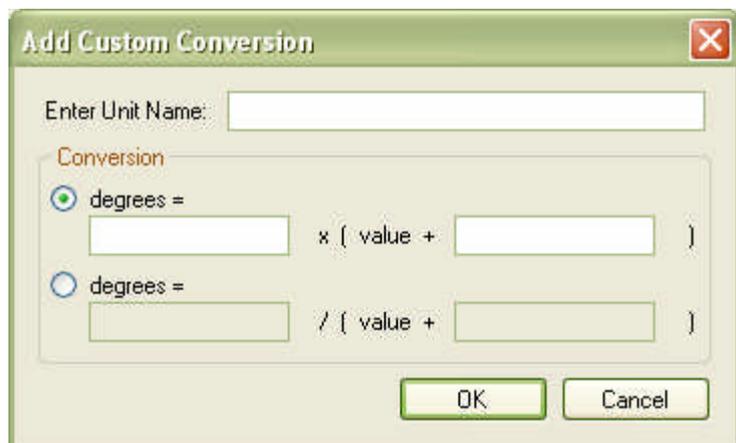


2.5. Adding Categories and Conversions

Select the third tool bar button to display the following window.



To add a conversion you need to select a category in the left hand list box, then click on the 'Add' button on the right hand side. This will display the following window.



Type the name of the unit in the 'Enter Unit Name' box, then you can enter the conversion to the 'basic' unit for the category. Usually the offset will be 0 (the only time it is used in the standard conversions is when converting from Celcius to Fahrenheit) and all you will typically need to enter is a multiplier. Sometimes the conversion is an inverse (such as when converting from kilometres per litre to litres per kilometre), in which case you can select the bottom radio button. Click the Ok button to save your conversion.

To add a category you just need to click on the 'Add' button on the left hand side. This will display the following window.



Then enter the name of the category and click OK to save it in the list. NOTE: If you don't enter any units for the category then it will not be saved. The first unit you enter for a new category will always have a multiplier of 1 and an offset of 0, and will be used as the basic unit that other units are converted to.

The Remove on the Options window do pretty much what they say. All changes are automatically saved on the fly. Cl

2.6. The About Window

Click on the last tool bar button. This will display the About window.



This is a simple window that gives some very basic information and a link to this help guide.

3. What you can convert

Distance (Length): metres, feet, feet (US Survey), yards, inches, centimetres, millimetres, miles, nautical miles, kilometres, astronomical units, light years, parsecs, angstroms, microns, hands, furlongs, fathoms, chains (surveyors'), links (surveyors'), ems (pica), picas (computer), picas (printers'), points (computer), points (printers'), perches, rods, poles, barleycorns, shackles, cables.

Speed (Velocity): metres per second, kilometres per hour, miles per hour, nautical miles per hour, metres per hour, kilometres per second, miles per second, feet per second, inches per second, yards per second, miles per minute, kilometres per minute.

Angles (Bearings): Degrees, Radians, Gradians, mils, mils (US/NATO), mils (Russia/WP).

Area: square metres, square yards, acres, square feet (UK and US), square feet (US Survey), hectares, ares, square centimetres, square inches, square kilometres, square miles, square millimetres, squares (of timber), square rods, square poles, townships, circular inches, hides, roods.

Volume (Capacity): litres, gallons (UK), dry gallons (US), liquid gallons (US), pints (UK), quarts (UK), fluid ounces (UK), dry pints (US), liquid pints (US), dry quarts (US), liquid quarts (US), fluid ounces (US), decilitres, millilitres, litres (1901 - 1964), cubic feet, cubic inches, cubic yards, cubic millimetres, centilitres, cubic centimetres, teaspoons (metric), tablespoons (metric), barrels (oil), bushels (UK), bushels (US), pecks (US), pecks (UK), fluid drachms (UK), gills (UK), gills (US), cups (UK), cups (US), minims (UK), sacks (UK), quarters (UK), chaldrons (UK), loads, cord feet, cords, measured ricks, board feet, shipping tons.

Weight (Mass): kilogrammes, pounds, grammes, ounces, stones, tons (UK or long), (US or short), tonnes, hundredweights, long, hundredweights, short, apothecaries ounces, troy ounces, troy pounds, slugs (or g-pounds), metric carats, grains, scruples, pennyweights, drachms, points, drams.

Density (Volumetric): kilogrammes per litre, kilogrammes per cubic metre, pounds per cubic inch, ounces per cubic inch, tonnes per cubic metre, grains per gallon (UK), grains per gallon (US), grammes per cubic centimetre, grammes per litre, grammes per millilitre, ounces per gallon (UK), ounces per gallon (US), pounds per cubic foot, pounds per gallon (UK), pounds per gallon (US), tons (UK) per cubic yard, tons (US) per cubic yard.

Line Density: kilogrammes per metre, pounds per foot, denier, drex, grammes per centimetre, grammes per kilometre, grammes per metre, grammes per millimetre, kilogrammes per kilometre, ounces per inch, ounces per foot, pounds per inch, pounds per yard, pounds per mile, tex, tons (UK) per mile, tons (US) per mile, tonnes per kilometre.

Temperature: Celcius, Fahrenheit, Kelvin.

Energy (Work): joules, foot pounds-force, calories (IT), calories (thermo), calories (food), kilowatt hours, newton metres, foot poundals, ergs, celcius heat units, kilogram-force metres.

Force: newtons, pounds force, dynes, kilograms force, kilonewtons, kips, poundals, sthenes, tonnes force, tons(UK) force, tons(US) force.

Fuel Consumption: kilometres per litre, miles per gallon (UK), miles per gallon (US), miles per litre, kilometres per gallon (UK), kilometres per gallon (US), litres per 100 kilometres, litres per 100 miles, gallons (UK) per 100 kilometres, gallons (US) per 100 kilometres, gallons (UK) per 100 miles, gallons (US) per 100 miles.

Power: watts, horsepower (electric), horsepower (metric), kilowatts, megawatts, calories (IT) per second, calories (therm) per second, calories (food) per second, joules per hour, foot pounds-force per second.

Pressure (Stress): pascals, pounds-force per square inch, atmospheres, bars, centimetres of mercury, centimetres of water, inches of mercury, inches of water, millimetres of mercury, millimetres of water, feet of water, metres of water, kilogrammes-force per square centimetre, kilogrammes-force per square metre, kips per square inch, millibars, newtons per square centimetre, newtons per square metre, newtons per square millimetre, pounds-force per square foot, poundals per square foot, tons (UK)-force per square foot, tons (UK)-force per square inch, tons (US)-force per square foot, tons (US)-force per square inch, tonnes-force per square centimetre, tonnes-force per square metre.

Spread Rate by Mass: kilogrammes per square metre, pounds per square foot, grammes per square centimetre, grammes per square metre, inches of rainfall, kilogrammes per hectare, kilogrammes per square centimetre, millimetres of rainfall, ounces per square foot, ounces per square inch, ounces per square yard, pounds per acre, pounds per square inch, pounds per square yard, tonnes per hectare, tons (UK) per acre, tons (US) per acre.

Spread Rate by Volume: litres per square metre, inches of rainfall, cubic feet per acre, cubic inches per square yard, cubic yards per square mile, cubic metres per hectare, cubic metres per square kilometre, cubic metres per square metre, fluid ounces (UK) per square yard, gallons (UK) per acre, gallons (US) per acre, gallons (UK) per hectare, gallons (US) per hectare, litres per hectare, millilitres per square metre, millimetres of rainfall.

Torque: newton metres, foot pounds-force, dyne centimetres, gramme-force centimetres, kilogramme-force centimetres, kilogramme-force metres, newton centimetres, ounce-force inches, pound-force inches, poundal feet, ton (UK)-force feet, ton (US)-force feet, tonne-force metres.

Unit/Population Density: per square mile, per square kilometre, per square metre, per square yard, per acre, per are, per hectare, per square feet (UK and US), per square feet (US Survey).

If you think of any other units that it would be useful to convert between, please let me know and I'll add them to the next release.

4. Troubleshooting

How can I enter very large and very small numbers?

You should enter the number in scientific notation, using E to indicate $\times 10^{\wedge}$. E.g. 1200 can be written 1.2E3 and 0.0012 can be written 1.2E-3. The largest and smallest numbers you can enter depends on the conversion - if they are too large or small then the 'Gives you' box will be empty.

Is there anyway to convert pixel units into a length say in centimetres or millimetres?

There is no single conversion to do this because it depends on the resolution (i.e. dpi) of the device printing or displaying the image. You could certainly set up your own custom conversions for the most popular resolutions (1200, 600, 300, 150, 120, 96, and 72 dpi). If you would like a tutorial on how to do this then get in touch - if enough people ask for it then it will happen.

5. Known Bugs/Features/Limitations

Why are metres not spelled meters and kilometres not spelled kilometers?

This is a UK English version, so UK English spellings are used. So you will see millimetres not millimeters and litres not liters.

Why is Mach not included in the Speed category?

Mach number is a measure of the speed of sound, which itself is dependent on the density of the material the sound is travelling through. As such, there is no simple conversion to Mach.