RiadaConvert 1.3



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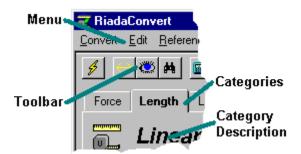
Introduction To RiadaConvert

With RiadaConvert you can:

- Convert from one unit to another
- Find out interesting information about units
- Use obscure, old or international units of measure
- Create new categories of units
- Create new units

Elements Of RiadaConvert

RiadaConvert has the following elements:



Menu

Use the menu, to select commands.

Toolbar

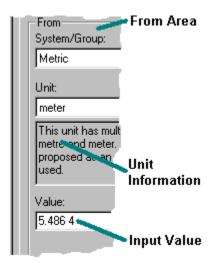
The toolbar is used to quickly access commands frequently used. Hold the mouse over an icon to get a description of its purpose.

Categories

The category tabs allow you to select a different category to work with. Categories are broad groupings of units. For example, Length, Area and Volume are all categories. You may add your own categories. See <u>How To Create A New Category</u> for details.

Category Description

The category description is another way to describe the category. Sometimes, categories will have a more formal description, such as Velocity for the Speed category.



From Area

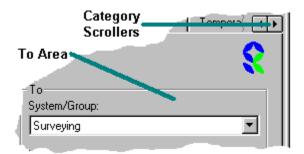
The From area is where you specify the information for the unit that you are converting from.

Unit Information

The unit information may show you additional information about the unit you are converting from.

Input Value

This is where you type the value to be converted. You may press ENTER after you type the value to convert it, or use the <u>Convert!</u> command.

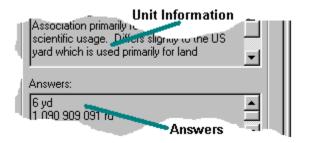


Category Scrollers

Use the category scrollers, to scroll the category tabs into view. A category tab may be selected with the mouse, once it is in view.

To Area

The To area is where you specify the information for the unit that you are converting to.



Unit Information

The unit information may show you additional information about the unit that you are converting to.

Answers

This is the area where the converted answers appear. The content depends on the options you have chosen in the <u>Options dialog box</u>. You may copy from this area by highlighting the answer and pressing CTRL+C. You may then paste the answers into another application.

Toolbar



The toolbar is displayed across the top of the application window, below the menu bar. The toolbar provides quick mouse access to many tools available in RiadaConvert,

Click To

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Convert a value.

Show the conversion factor (formula) between the current units.

Show all the available units.

- ¥ Find a unit.
- Start the Windows calculator *******
 - Show SI and metric prefixes table
- $\pi [$ Show physical constants table
- 8 Show information about RiadaConvert.
- 15 Show context help for RiadaConvert.

Title Bar



The title bar is located along the top of a window

To move the window, drag the title bar.

Status Bar

The status bar is displayed at the bottom of RiadaConvert.

The left area of the status bar describes actions of menu items as you use the arrow keys to navigate through menus. Similarly, this area shows messages that describe the actions of toolbar buttons.

How To Convert A Unit

In the following procedure, a conversion from metres/meters to feet will be used. To convert a value from one unit, to another, follow these steps:

Step 1

Select the category that the value belongs to, by clicking the appropriate category tab. For example, for a conversion from metres/meters to feet, select the Length category.

Step 2

Select the <u>System/Group</u> in the From area, for the unit you are converting from. Many units belong to several systems/groups. In the above example, you could select the <u>metric</u> or <u>SI</u> system/group.

Step 3

Select the Unit in the From area.

Step 4

Select the **System/Group** in the **To** area, for the unit you are converting to. In the above example, you could select the <u>imperial</u> system/group.

Step 5

Select the Unit in the To area.

Step 6

Select the Value field with the mouse, then type in the value you wish to convert. For example, type **23.45**.

Step 7

Either press ENTER, or use the <u>Convert!</u> command to convert the value. The answer is displayed in the **Answers** area.

How To Create A New Category

To create a new category, use the following steps:

Step 1

Ensure that the Allow Editing check box has been selected in the Options dialog box.

Step 2

From the Edit menu, select Categories...

Step 3

In the Categories dialog box, click the New... button.

Step 4

In the <u>Category Name dialog box</u>, type a name for the category in the **Name** field, then choose **OK**.

Step 5

Fill out any other required fields in the Categories dialog box.

Step 6

Select the **Done** button

How To Create A New Unit

Follow the procedure below to add a new unit:

Step 1

Select the category that you wish to add the unit to, by clicking the category tab.

Step 2

Make sure that the Allow Editing check box has been selected in the Options dialog box.

Step 3

From the Edit menu, choose Units...

Step 4

In the <u>Units dialog box</u>, choose the New... button.

Step 5

In the <u>Unit Name dialog box</u>, type in a name for the new unit in the Name field, and choose OK.

Step 6

Fill out the **System** field and the **Factor** field for the unit. These fields MUST be filled out.

Step 7

If the unit is the first unit in the category, make it the base unit by selecting the **Advanced...** button to bring up the <u>Advanced dialog box</u>, then select the **Base Unit** check box, then click the **OK** button.

One and only one base unit must be selected for each category. All other units should be derived from this base unit. For example, in the Length category, the base unit would be the metre/meter, and other units, such as the foot, would be defined in terms of the metre/meter.

Step 8

If the unit is not a numerical quantity, for example, a unit in the Words category, then make sure you select the **Advanced...** button to bring up the <u>Advanced dialog box</u>, then deselect the **Numeric** check box, then click the **OK** button.

This specifies that the unit is NOT a numerical quantity.

Step 9

If other advanced options are required, select the **Advanced...** button to show the <u>Advanced</u> <u>dialog box</u>, and fill out any other options that are required.

Step 10

Fill out any other relevant fields for the unit in the Units dialog box.

Step 11 Select the Done button.

Convert menu commands

The Convert menu offers the following commands:

Convert!	Converts the values.
Conversion Factor	Shows the conversions factor (formula) between the current
	units.
Show All	Shows all the available units.
<u>Find</u>	Finds a unit.
Options	Changes options for RiadaConvert.
<u>Exit</u>	Exits RiadaConvert.

Convert! command (Convert menu)

Use this command to convert the value in the **From** area, to an answer, as specified in the **To** Area. Normally, you will not need to use this command, as the system updates the answers as soon as any new units or systems are selected, and the ENTER key is pressed.

Shortcuts

Mouse: Click on the Convert! icon. Keys: CTRL+C

Conversion Factor command (Convert menu)

Use this command to show the conversion factor or formula between the current to and from units. The command shows the <u>Conversion Factor dialog box</u>.

Shortcuts

Mouse: Click on the Conversion Factor icon.

Show All command (Convert menu)

To see the <u>Show All</u> window, use this command. It shows all units available to RiadaConvert.

Shortcuts

Mouse: Click on the Show All icon. Keys: CTRL+A

Find command (Convert menu)

This command allows you to find a specific unit and displays the <u>Find</u> dialog box.

Shortcuts

Mouse:Click on the Find icon.Keys:CTRL+F

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Options command (Convert menu)

The Options command allows you to customise some aspects of RiadaConvert. See the <u>Options</u> <u>dialog box</u> for more details.

Shortcut

Keys: CTRL+O

Exit command (Convert menu)

Use this command to end your RiadaConvert session. You can also use the <u>Close</u> command on the application Control menu. If any categories or units have been edited, RiadaConvert prompts you to save the data.

Shortcuts

Mouse: Double-click the application's Control menu button.



Keys: ALT+F4

Edit menu commands

The commands on the Edit menu, are only available if the **Allow Editing** checkbox has been selected in the <u>Options</u> dialog box.

The Edit menu offers the following commands:

Categories...Adds, removes or changes the available categories.Units...Adds, removes or changes the available units in the
current category.

Categories command (Edit menu)

Use the Categories command to add, remove or change categories. This command displays the <u>Categories dialog box</u>.

Shortcut

Keys: CTRL+G

Units command (Edit menu)

This command allows you to add, remove or change the units in the current category. Also see, the <u>Units dialog box</u>.

Shortcut

Keys: CTRL+U

Reference menu commands

The Reference menu offers the following commands:

<u>Calculator</u>	Start the Windows calculator.
Prefixes	Shows the SI and metric prefixes table.
Physical Constants	Shows the physical constants table.
<u>SI</u>	Displays information about the SI system.
Metric	Displays information about the metric system.
Imperial	Displays information about the imperial system.
U.S. Customary	Displays information about the U.S. customary system.
Avoirdupois	Displays information about the avoirdupois system.
Apothecaries	Displays information about the apothecaries system.
<u>Troy</u>	Displays information about the troy system.
Other Systems	Displays information about other systems.

Calculator command (Convert menu)

This command allows you to start the Windows calculator, which you can use to perform calculations. You may copy values from RiadaConvert into the calculator, or paste the results of calculations from the calculator to RiadaConvert.

Shortcuts

Mouse: Click on the Calculator icon.

Help menu commands

The Help menu offers the following commands, which provide you assistance with RiadaConvert:

Index	Offers you an index to topics on which you can get help.
<u>Using Help</u>	Provides general instructions on using help.
<u>About</u>	Displays the version number and copyright information.

Context Help command

Use the Context Help command to obtain help on some portion of RiadaConvert. When you choose the Toolbar's Context Help button, the mouse pointer will change to an arrow and question mark. Then click somewhere in the RiadaConvert window, such as another Toolbar button. The Help topic will be shown for the item you clicked.

Shortcut

Mouse:Click on the Context Help iconKeys:SHIFT+F1



Index command (Help menu)

Use this command to display the opening screen of Help. From the opening screen, you can jump to step-by-step instructions for using RiadaConvert and various types of reference information.

Once you open Help, you can click the Contents button whenever you want to return to the opening screen.

Using Help command (Help menu)

Use this command for instructions about using Help.

About command (Help menu)

Use this command to display the copyright notice and version number of RiadaConvert.

Conversion Factor dialog box

The Conversion Factor dialog box shows the conversion factor or formula between the current **From Unit**, and the current **To Unit**. If the conversion between the units cannot be represented as a simple factor (i.e. degree Farenheit to degree Calcius), then a formula is displayed instead.

Show All window

The Show All window lists all the available units, grouped by their categories. You may use the mouse, or keyboard to select a unit to perform an operation on. The available operations are:

Go To

If a unit has been selected, use this option to jump to the unit.

Make convert.txt

Select this option to produce the file **convert.txt** in the current directory. The file is the same as the display in the **Show All** window.

Find dialog box

Use the Find dialog box to jump straight to a category and a unit. Use the **Unit** option to narrow the search. Select the unit with the mouse or keyboard, then select **OK**. The selected unit will be placed in the **From Unit** area.

Options dialog box

The following options in RiadaConvert may be customised by using the Options dialog box:

Significant Digits

By selecting between 1 and 50 significant digits, you can customise the way numbers appear in RiadaConvert. If a number needs to be displayed with more digits (including the decimal point) than has been selected, the value will be displayed in scientific notation instead.

Thousands Separators

If selected, prints the thousands separator every three digits on the left of the decimal separator. For example, **1,234,567.89**. The thousands separator used, depends on which country you are in, and can also be changed through the Control Panel in Windows.

Thousandths Separators

When this option is selected, spaces will be display every three digits on the right of the decimal separator. For example, **1.234 567 89**. This can make values easier to read, and is the standard way to print values in some countries.

Show Abbreviations

If the **Show Abbreviations** option is selected, values in the **Answers** area, will be shown with the appropriate abbreviation if one has been specified. For example **23°C**.

Show Alternative Formats

When the **Show Alternative Formats** options is selected, other possible formats for the answer will be shown, where available. For example, if centimetres/centimeters was the requested answer unit and the **Show Alternative Formats** was selected, then the **Answers** area may show something like, **100 cm**, **1 m**, **1,000 mm**.

When the option is not selected, only the requested unit will be displayed in the **Answers** area.

Show Infrequently Used Prefixes

Use this option if you wish to see units that have prefixes that are infrequently used. For example, when this option is selected, the unit attocentimetre/attocentimeter appears in the unit lists.

This option does not affect infrequently used units from appearing as alternative formats.

Allow Editing

The editing options in the Edit menu, can only be selected if this option is selected.

Categories dialog box

The Categories dialog box can be used to add, remove or change categories. Note that most options may only be modified when editing categories that you have added yourself. The following options are available:

Category

Use this option to select the categories to be changed.

Name

To change the name of an existing category, use the Name field.

Description

Use this field to supply a description for the category.

Systems Related

If conversions can take place between the different systems in the category, then select this checkbox. If the system or groups used in the category are unrelated, then deselect this checkbox.

Icon

Use this button to display the <u>Icon dialog box</u>, and to change the icon displayed for the category.

New

If a new category is required, click the **New...** button. The <u>Category Name dialog box</u> will be shown.

Delete

Clicking the **Delete** button will delete the currently displayed category. Confirmation is required.

Units dialog box

The Units dialog box is used to add, remove or change units in the *current* category. Most options are only available when editing units you have created yourself, or when you have overwritten a standard unit. The following options are available:

Unit

Use this option to select the unit to be changed.

Name

To change the name of an existing unit, use the **Name** field. If the unit has additional spellings, they may be separated by a | (vertical bar). For example, the metre and meter could entered as one unit, with alternative spellings as **metre | meter**. Spaces after the | should not be entered, unless they are required in the unit name.

Description

Any information that is relevant or interesting may be entered into the **Description** field.

Systems

The **Systems** option allows the unit to be associated with one or more <u>systems</u>. Multiple systems may be entered by separating them with a | (vertical bar) symbol. Spaces after the | should not be entered.

Abbreviations

If the unit has one or more abbreviations, then use the Abbreviations option to enter them. Multiple abbreviations should be separated by a | (vertical bar) symbol, and spaces are significant.

Sub Units

If the unit is part of a group of units, such as the metric system, then one or more sub units may be entered. For example, if you were changing the metre/meter unit, then you could specify the centimetre/centimeter as a sub unit. Separate the sub units with a | (vertical bar) symbol if multiple sub units are required.

Super Units

Like sub units, if the unit belongs to a group of units, you may specify one or more super units, separated by a | (vertical bar) symbol. For example, if you were changing the metre/meter unit, you could enter the kilometre/kilometer as the super unit

Factor

If the unit can be related to another unit as a factor, then enter its factor here. Expressions may be used that relate the unit to other units. For example, if the unit that you were changing was the centimetre/centimeter, then in the Factor option you could enter **metre * 0.01** (the name **metre** is how base name of the **metre/meter** unit is defined), which

would be the factor for centimetre/centimeter. Expressions must be based on names of previously defined units, or the built in constant **pi**.

Advanced

If the unit is not related to another unit by a simple factor, or it is an advanced unit, then choose the **Advanced...** button, which displays the <u>Advanced dialog box</u>.

Overwrite

This checkbox is only visible when the unit is a supplied unit, and not one you have created. You may use this check box to redefine an existing supplied unit. For example, suppose that you wanted to add a description to a supplied unit, you may click the checkbox to allow editing of the current unit.

If you wish to restore the unit to the way it was originally supplied, deselect the checkbox, and the next time you load RiadaConvert, the original unit will be loaded.

New

If a new unit is required, select the **New...** button. The <u>Unit Name dialog box</u> will be shown.

Delete

Choosing the **Delete** button will delete the currently displayed unit. Confirmation is required.

Unit Name dialog box

Enter the name of the new unit in the Name field, then click on the OK button.

If the unit has additional spellings, they may be separated by a | (vertical bar). For example, the metre and meter could entered as one unit, with alternative spellings as **metreImeter**. Spaces after the | should not be entered, unless they are required in the unit name.

Icon dialog box

The Icon dialog box is used to specify an icon for a category. The following options are available:

Filename

Enter the filename of the location of the icon. The filename may refer to an executable file (ie .exe, .com), or it may refer to an icon file,(ie .ico). The file referred to should be accessible to RiadaConvert, each time it is run. The filename may be specified by using the **Browse...** button.

Current Icon

This shows the current icon for the category, that is found in the file referred to by the **Filename** field. Select the icon that is to be used for the category.

Category Name dialog box

Enter the name of the new category in the **Name** field, then click the **OK** button.

Advanced dialog box

The Advanced dialog box is used to specify advanced options for a unit. The following options are available:

Base Unit

Select this option, if the unit is a base unit for the category (eg. metre/meter in the Length category). There must be one, and only one base unit for each category. All other units will be referenced from this base unit.

Numeric

Generally, most units are numeric. However, if the unit is a tabulated unit (not related to other units via a factor, but with a table or text value), then make sure that this option is NOT selected.

Infrequently Used Prefix

If the unit is one with an infrequently used prefix (eg. attometre/attometer), then select this option. The unit will not be placed in the unit lists if the **Show Infrequently Used Prefixes** option in the <u>Options dialog box</u> is not selected.

Use Expressions

Select this option if the unit is not related to other units through a simple factor. The **To** and **From** fields must be filled out if this option is selected.

То

Enter an expression that converts *from* a base unit to this unit. A variable called **base**, is used to hold the base value. For example, the expression may be *base* + 2.

From

Enter an expression that converts the entered value *to* the base unit. A variable called **input** is used to hold the entered value. For example, the expression may be *input - 2*.

Systems And Groups

A system or group is a collection of related units. Their relation may be functional (eg Marine), or it may be official or through common usage (eg Metric).

A unit may belong to several systems or groups. For example, a knot belongs to the Marine group, and also to the Metric system.

Prefixes

Output	Multiplication Factor	Name	Symbol
1e18	1,000,000,000,000,000,000	exa	E
1e15	1,000,000,000,000,000	peta	Р
1e12	1,000,000,000,000	tera	Т
1e9	1,000,000,000	giga	G
1e6	1,000,000	mega	Μ
1e3	1,000	kilo	k
1e2	100	hecto*	h
10	10	deca/deka*†	da
1e-1	0.1	deci*	d
1e-2	0.01	centi*	с
1e-3	0.001	milli	m
1e-6	0.000 001	micro	μ
1e-9	0.000 000 001	nano	n
1e-12	0.000 000 000 001	pico	р
1e-15	0.000 000 000 000 001	femto	f
1e-18	0.000 000 000 000 000 001	atto	а

* These prefixes are not prefered in the <u>SI</u> standard, and should be avoided.
† This prefix can be deca or deka, as indicated.

Physical Constants

Quantity	Symbol	Amount	Unit
Acceleration (standard free fall)	g^{n}	9.806 65	m/s^2
Atmospheric pressure (standard)	atm	101 325	Ра
Atomic mass constant	M u	1.660 5402e-27	kg
Avogradro constant	N_A	6.022 1367e23	mol ⁻¹
Bohr radius	a_0	0.529 177 249e-10	m
Boltzmann constant	k	1.380 658e-23	J K ⁻¹
Classical electron radius	Гe	2.817 940 92e-15	m
Compton wavelength	λc	2.426 310 58e-12	m
Electron charge	е	1.602 177 33e-19	С
Electron magnetic moment	μ e	928 477 01e-26	J T ⁻¹
Electron rest mass	Me	9.109 3897e-31	kg
Electron volt	eV	1.602 177 33e-19	J
Faraday constant	F	96,485.309	C mol ⁻¹
Fine-structure constant	α	7.297 353 08e-3	-
First radiation constant	C 1	3.741 7749e-16	W m ²
Gas constant	R	8.314 510	J mol ⁻¹ K ⁻¹
Gravitational constant	G	6.672 59e-11	N m² kg²
Hartree energy	$E_{ m h}$	4.359 7482e-18	J
Inverse fine-structure constant	$lpha^{-1}$	137.035 9895	-
Neutron rest mass	m n	1.674 9286e-27	kg
Pi	π	3.141 592 653 6	-
Planck's constant	h	6.626 0755e-34	Js
Proton magnetic moment	$\mu_{ m p}$	1.410 607 61e-26	J/T^{-1}
Proton rest mass	mp	1.672 6231e-27	kg
Rydberg constant	R_{∞}	10 973 731.534	m^{-1}
Second radiation constant	C 2	0.014 387 69	m K
Thompson cross section	Сe	0.665 246 16e-28	m ²
Velocity of light	С	299 792 456	m/s
Wien displacement law constant	b	2.897 756e-3	m K

Metric System

The metric system was established in France in 1799 with the adoption of the standard metric metre. The name comes from the Greek word metron, meaning "a measure". It is a decimal system of measurement, that defines standards of length, mass and capacity, as well as defining prefixes for multiple and sub-multiples.

The system began with the work of Gabriel Mouton, vicar of St. Pauls Church, Lyon in 1670, who put forward a length of measure that would be equal to the arc of one minute of longitude subdivided decimally.

Following more than one hundred and twenty years of debate and revision, the surveys of two engineers, Jean Delambre and Pierre Méchain, (commissioned by the imprisoned King Louis XVI) were used to define the metre, as being one ten-millionth part of a meridional quadrant of the Earth, (measured from Barcelona, Spain to Dunkirk, Northern France).

The metric system quickly spread through Europe as a result of the French revolution and Napoleons campaigns. The metric system became the legal monopoly in France in 1840.

All major counties, with the exception of the U.S., and to a lesser degree the U.K. have adopted the metric system. The U.S. was a signatory to the Metric Convention of 1875, and in 1893 the U.S. Office of Weights and Measures announced that the prototype metre (meter in the U.S.) and kilogram would be used to derive all U.S. customary units. In 1963, the U.K. weights and measures were redefined in terms of the metric system, and in 1965, a national changeover began.

SI (Système International d'Unités)

Derived from the eighteenth century <u>metric system</u>, Système International d'Unités (abbreviated to SI in all languages), supersedes the metric system in scientific and technical usage, by providing seven coherent units as standards applicable to all disciplines, rather than relying on physical artifacts as a basis of measurement.

When a system is coherent, all units use the numerical factor of one. For example, the unit of velocity is the metre (meter) per second, which is equal to 1 metre (meter) / 1 second.

Adopted at the 1960 General Conference on Weights and Measures, the units employed in the SI are listed below:

Base Units		
Quantity	Name of unit	Symbol
length	metre (meter)	m
mass	kilogram	kg
time	second	S
electric current	ampere	А
thermodynamic temperature	kelvin	Κ
amount of substance	mole	mol
luminous intensity	candela	cd
Supplementary Units		
Quantity	Name of Unit	Symbol
plane angle	radian	rad
solid angle	steradian	sr

All major counties with the exception of the U.S. adopted the SI system by the early 1970s. The U.S. agreed to move to the SI over a period of ten years, following investigations into the impact of the metric and SI systems.

Avoirdupois

In about 1300, London merchants, influenced by the French, adopted a system of weights called avoirdupois (from the old French term, aveir-de-peis), meaning "goods of weight".

This system, used to weigh bulkier goods, was based on a pound of 7,000 grains or 16 ounces. It is still used in some English-speaking countries

Apothecaries[´]

This is a system that had been developed by medieval apothecaries, a Latin term which means a person who sells spices and drugs, or an old term for pharmacist.

Until very recently the system was similar to the <u>troy system</u>, with 5,760 grains or 12 ounces to the pound.

Most pharmacists and physicians now use the metric system.

Troy

During the 15th century, a system of weights was developed called the troy system, probably named for the ounce of Troyes, France.

It was primarily used by jewelers to weigh gold, silver, and precious metals. The troy ounce is made up of 480 grains, with 12 ounces to the pound.

Imperial

The imperial system, developed over many hundreds of years, mainly through popular usage, from medieval times. In most counties, with the exception of the U.S. and Britain and her colonies, the ancient imperial systems, were replaced with the <u>metric system</u>.

Because of the abuse of the weights and measures, a charter was included in the Magna Carta of 1215 to correct those of wine and grain. In 1218, a royal ordinance entitled Assize of Weights and Measures, defined many of the imperial units.

The Champagne Fairs influenced the development of the three systems of weights, where standardisation was required. Those systems were called $\underline{\text{troy}}$ (from the city Troyes), <u>avoirdupois</u> and <u>apothecaries'</u>.

Several redefinitions occurred in the U.K. over time, most notably in 1486 after a Parliamentary inquiry; in 1588 under Elizabeth I; in 1701 when the corn bushel was defined; in 1707 when the wine gallon was defined; the new Weights and Measures Act of 1824; the Act of 1878 which redefined the yard; and in 1963 all weights and measure were redefined in terms of the <u>metric</u> system, and the change over to the metric system began.

U.S. Customary

Although the U.S. passed the Metric Act of 1866, which permitted the use of the <u>metric system</u> in the United States, it is still the only major nation, not to have adopted the metric system. It has been hard for the metric system to gain acceptance in the U.S., and this was foreshadowed as early as 1821, when Secretary of State, John Quincy admitted the impossibility of the metric system winning acceptance in the United States, in his famous report to congress.

The U.S. was a signatory to the Metric Convention of 1875, and in 1893 the U.S. Office of Weights and Measures announced that the prototype metre/meter and kilogram would be used to derive all U.S. customary units. Yet, the U.S. still resists the change to the metric system.

The U.S. customary system was based on the British <u>imperial system</u>, but several deviations have occurred over time.

Other Systems

The following is a list of other systems that may occur in RiadaConvert. Most systems are derived from either the <u>metric</u> or <u>imperial</u> systems, the main difference being in the base unit used, and the selection of other acceptable units and derived units.

Differences in the systems may also be manifested by whether the system is coherent or not. When a system is coherent, all units use the numerical factor of one. For example, in the SI system (which is coherent), the unit of velocity is the metre (meter) per second, which is equal to 1 metre (meter) / 1 second.

Metric Systems		
Name	Description	Coherent
CGS	Replaced by the SI system, was introduced on the advice of	Yes
	Kelvin.	
Mie	A mixing of CGS and MKS systems, formerly used mainly in	Yes
	Germany.	
MkgfS	Used in engineering, but not often used now.	No
MKS	Also called the Giorgi system.	Yes
MTS	Introduced in 1914 and mainly used in France.	Yes

Imperial Systems

Name	Description	Coherent
FlbfS	Used in engineering as an alternative to the FPS and FSS systems.	No
FPS	Previously used in the U.S. and U.K.	Yes
FSS	Used in engineering as an alternative to the FPS system.	Yes
Stroud	Introduced in 1880 by Stroud.	No

Arbitrary Systems

Name	Description	Coherent
Hartree	This is a natural system introduced in 1927 to for use in atomic	Yes
	work.	

Move command (Control menu)

Use this command to display a four-headed arrow so you can move the active window or dialog box with the arrow keys.

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Note: This command is unavailable if you maximize the window.

Shortcut

Keys: CTRL+F7

Close command (Control menu)

Use this command to close the active window or dialog box.

Double-clicking a Control-menu box is the same as choosing the Close command.



Switch to command (application Control menu)

Use this command to display a list of all open applications. Use this "Task List" to switch to or close an application on the list.

Shortcut

Keys: CTRL+ESC

Dialog Box Options

When you choose the Switch To command, you will be presented with a dialog box with the following options:

Task List

Select the application you want to switch to or close.

Switch To

Makes the selected application active.

End Task

Closes the selected application.

Cancel

Closes the Task List box.

Cascade

Arranges open applications so they overlap and you can see each title bar. This option does not affect applications reduced to icons.

Tile

Arranges open applications into windows that do not overlap. This option does not affect applications reduced to icons.

Arrange Icons

Arranges the icons of all minimized applications across the bottom of the screen.

No Help Available

No help is available for this area of the window.

No Help Available

No help is available for this message box.

Registration Information

Information On Shareware

RiadaConvert is a shareware program. This does not mean that this software is free. It simply means that you are permitted to evaluate its suitability for a period of 30 days before you make payment. If you feel that you do not require this software, then you must remove all traces of it from your computer, otherwise, you must register this software, and make payment to Riada.

Being shareware, Riada also encourages you to copy, and distribute this software to other users. You may distribute it to a BBS (Bulletin Board Service), the Internet or other users. If you have registered this software, and you have paid for it using a credit card, then you may be eligible for a <u>*Riada Refund*</u>.

Cost

RiadaConvert costs \$25 Australian Dollars (approximately \$19 U.S. Dollars) to register. There are a number of payment and ordering options. For more information, please see <u>Payment/Order Options</u>.

What You Get

When you register this product, you will receive a Registration Code from Riada, which will allow the software to execute beyond the 30 day evaluation period. Also, any registration reminder messages will disappear, and all functionality will be available. As an added bonus, you will not be breaking the law!

After registering, you are entitled to support from Riada for one year, and you will also be registered for any minor updates that Riada release. This means that you may download any newer minor versions, and you will also be registered for these.

How To Register

Riada has tried to make registration as easy as possible, so registration is performed inside the software. Simply fill out the on-line form, and submit this along with payment to Riada. For more information, see <u>Register...</u> and <u>Setup menu</u>.

Riada Refunds

What Are Riada Refunds?

Well, its simple, and works like this. If you have registered RiadaConvert with a credit card, you may be eligible for a *Riada Refund*. If you distribute copies of RiadaConvert, (for example, to a BBS, the Internet or just a friend) and someone else registers this copy, then Riada may make a refund (conditions apply, see below) of **A\$5** to your credit card! This happens *each* time someone registers a copy that you have distributed, so potentially, you may earn back the original cost of RiadaConvert, or even make money. Yes, that's right, Riada may pay you for helping us distribute RiadaConvert to others.

How Does It Work?

RiadaConvert is able to detect when it has been moved, so when you copy **all** the RiadaConvert files, or use **<u>Setup|Copy/Distribute...</u>**, RiadaConvert detects this, and un-registers itself.

However, your original Registration Code is retained, so that when the next person registers this copy, and sends Riada their registration form, your Registration Code is included on the form. Riada may then search for your Registration Code in our records, and if we find a match, we will look at your details, and if you have registered your copy by credit card, we may make a refund.

Riada may also send you advice via fax, e-mail or mail about any refunds that have been paid in the preceding month. This advice will usually be sent at the end of each month. So potentially, you may receive advice, indicating that you have received several refunds in the preceding month.

Please notify any misuse of this offer to Riada, at:

Internet e-mail:

support@riada.com.au
or fax:
+61 3 9510 9586
or mail:
Riada
PO Box 1141
WINDSOR VIC 3181
Australia

Conditions

Riada reserves the right to cease this offer at any time, without notice or reason. Riada also reserves the right to deny payment of a Riada Refund to any individual or organisation, without reason or notification, especially, but not exclusively, when Riada believes that an individual or organisation is or has attempted to acquire Riada Refunds in a fraudulent, or in Riada's opinion, a morally corrupt manner. Riada reserves the right to initiate prosecution against any individual or organisation, that it believes is illegally misusing this offer. Riada is not held responsible for any actions in relation to this offer by any other party. Riada will make payments, at it's own discretion, usually by a credit card refund, in Australian currency. Riada reserves the right to make payments at it's own discretion, in other currencies or methods, as it sees fit.

Payment/Order Options

RiadaConvert costs \$25 Australian Dollars (approximately \$19 U.S. Dollars), which entitles you to support for the major version which you have registered, for one year. Your registration will work for all minor versions released, so if you download a newer minor version, your registration will work with that version.

After registration, any registration reminder messages will be removed, and all functionality will be enabled, and you will be running a legal copy!

There are a number of options available for payment.

Credit Card Payment

Fill in as much detail in the Order Details dialog box as possible, and make sure that you complete the <u>Credit Card Details dialog box</u>. You may send the Order Details to Riada via Internet e-mail, or fax. When ordering by credit card, you may be eligible to take advantage of <u>*Riada Refunds*</u>.

Ordering Via Internet E-Mail

Remember to fill in the **Internet Address** field of the <u>Contact Details dialog box</u>, so that Riada can e-mail your Registration Code to you. Make an Order Details form file (**register.txt**) with the <u>Print/View Order Details dialog box</u> and attach or paste this form to an e-mail message and send the Order Details form to Riada, at:

support@riada.com.au

Riada will return a Registration Code via Internet e-mail, which you can use to register RiadaConvert.

Ordering Via Fax

Remember to fill in the **Fax** field of the <u>Contact Details dialog box</u>, so that Riada can fax your Registration Code to you. Print the Order Details form with the <u>Print/View Order Details dialog</u> <u>box</u> and remember to sign the form. Fax the Order Details form to Riada, at: **+61 3 9510 9586**

Riada will return a Registration Code via fax, which you may use to register RiadaConvert.

International Money Order Payment

Please note, that due to postal services, beyond the control of Riada, this method of ordering may take a long time. Remember to complete the <u>Delivery Instructions dialog box</u> (unless you have specified an Internet e-mail address or fax number), before printing the Order Details form with the <u>Print/View Order Details dialog box</u>. Remember to sign the form, then draw an international money order in Australian dollars, to the amount of A\$25 (approximately \$19 U.S. Dollars), payable to Riada. Send this money order, along with a printout of the Order Details form to:

Riada PO Box 1141 WINDSOR VIC 3181

Australia

If you have specified an Internet e-mail address or a fax number, Riada will return a Registration Code using this method, otherwise, Riada will return a Registration Code via mail. You may use this code to register RiadaConvert.

Bank Check/Cheque Payment

Please note, that due to postal services, beyond the control of Riada, this method of ordering may take a long time. Remember to complete the <u>Delivery Instructions dialog box</u> (unless you have specified an Internet e-mail address or fax number), before printing the Order Details form with the <u>Print/View Order Details dialog box</u>. Remember to sign the form, then draw a *bank* check/cheque in Australian dollars, to the amount of A\$25 (approximately \$19 U.S. Dollars), payable to Riada. Send this check/cheque, along with a printout of the Order Details form to: **Riada**

PO Box 1141 WINDSOR VIC 3181

Australia

If you have specified an Internet e-mail address or a fax number, Riada will return a Registration Code using this method, otherwise, Riada will return a Registration Code via mail. You may use this code to register RiadaConvert.

Setup menu commands

The Setup menu offers the following commands:

Install Group & Icons	Installs a group and icons to quickly start RiadaConvert.
Registration Information	Display information about registration.
<u>Register</u>	Register RiadaConvert.
Copy/Distribute	Distribute shareware copies of RiadaConvert to other
	users.

Install Group & Icons command (Setup menu)

The Install Group & Icons command allows you to create a group called RiadaConvert, and install icons inside this group. This allows you to quickly start RiadaConvert by just clicking an icon.

Shortcut

Keys: CTRL+G

Register command (Setup menu)

This command displays the <u>Register dialog box</u>, which you can use to register RiadaConvert.

Shortcut

Keys: CTRL+R

Copy/Distribute command (Setup menu)

This command displays the <u>Copy/Distribute dialog box</u>, which you can use to distribute shareware copies of RiadaConvert.

Shortcut

Keys: CTRL+C

Registration dialog box

This dialog box is used to register RiadaConvert. Registration is broken into a number of steps. Each step is presented as a button. Normally, to register RiadaConvert, you should click on each button in turn and follow the instructions.

Step 1

Click on the **Order Details...** button. This will bring up the Order Details dialog box, where you should fill out as many details as possible. If you intend to order by credit card, ensure you complete the <u>Credit Card Details</u> dialog box.

Please note, that to take advantage of *<u>Riada Refunds</u>*, you must order RiadaConvert with a credit card.

Step 2

Use the **Print/View Order Details...** button to display the <u>Print/View dialog box</u>. Use the dialog box to view or print the details that you have entered. With this dialog box, you may also save the information to a text file called **register.txt** in the directory where RiadaConvert is located. This will allow you to send this file as Internet e-mail if you wish to order this way.

Step 3

Click on the **Payment/Order Options...** button to see what options there are for <u>payment and</u> <u>ordering</u>. Once you have decided on your method of payment and ordering, send the payment (e-mail, fax, mail, etc), to Riada.

When Riada receives your order for registration, it will be processed, and Riada will send you a Registration Code.

Step 4

Use the **Register...** button to enter the Registration Code that has been sent to you by Riada, into the <u>Register dialog box</u>. Once this step has been successfully completed, RiadaConvert will be registered.

Register dialog box

Use this dialog box to enter the Registration Code that has been supplied to you by Riada. This will register RiadaConvert for your use. Once RiadaConvert has been registered, all reminder messages will disappear, and all functionality will be enabled.

In the **Registration Code** field, type the code supplied to you by Riada. Make sure that you enter this code *EXACTLY* as it has been supplied to you, including any punctuation. Click on the **OK** button once you have finished entering the code.

Contact Details dialog box

This dialog box is used to fill in information necessary for Riada to complete your registration order. Fill in as much information as possible, as this helps Riada return your Registration Code, or contact you if necessary. If you have an Internet e-mail address, ensure that you specify it, as this will allow Riada to return your Registration Code to you as quickly as possible, through e-mail.

If you do not have an e-mail address, but you have a fax, then don't forget to fill this out, so that Riada can quickly fax you the Registration Code. Make sure that you include all prefixes in your fax number, such as international prefixes and area codes. If you are not sure what they are, look in your local telephone book, or call your telephone company and ask what prefixes are necessary to dial your number when calling from outside your country.

If you do not have e-mail, or a fax, then make sure that you fill out the <u>Delivery Instructions</u> <u>dialog box</u>, so that Riada can mail your Registration Code.

Credit Card Details dialog box

If you wish to order RiadaConvert with a credit card, fill out this dialog box, completing all the fields. This is just like ordering a product with your credit card using mail order, or by the phone.

This information is not saved anywhere, it is only used so that you can print out the Order Details. Your credit card number will be encrypted in the Order Details, to help protect your number if you send this order via Internet e-mail.

To take advantage of *<u>Riada Refunds</u>*, you must order your product with a credit card.

Delivery Instructions dialog box

If you do not have an Internet e-mail address, or fax number, then you MUST fill out this dialog box. This should be a mailing address where Riada can send your Registration Code.

When filling out the Delivery Instructions, make sure that you enter the information as it will appear on a return envelope. Don't forget to include the country!

Optional Information dialog box

Please fill in the Optional Information dialog box to help Riada improve this product, and to build other products to help you.

We especially appreciate comments and suggestions, so please take a second to fill out the **Comments/Suggestions** field.

Print/View dialog box

This dialog box displays the Order Details that you have completed. Use this dialog box to print the information, by clicking on the **Print** button. Once the information has been printed, it can be sent by fax to Riada (if ordering by credit card) to complete your order. The printed form may also be sent by mail with payment. The form must be signed if sending the form by fax or mail.

You may click the **Copy to file 'register.txt'** button to produce a file with the Order Details in the directory where RiadaConvert is installed. This file may be sent as an attachment in Internet e-mail, or just pasted into an e-mail message.

Copy/Distribute RiadaConvert dialog box

Use this dialog box to copy and distribute shareware copies of RiadaConvert. Enter the location where you would like RiadaConvert copied to. All files necessary to run RiadaConvert will be copied to the new location. If you specify a directory that does not exist, it will be created.

Once you have copied RiadaConvert to a new location, you may place ALL the copied files on a BBS (Bulletin Board Service), on the Internet, or just give it to a friend to use. Usually, when placing the files on a BBS or the Internet, you should use a compression program such as PKZIP (available as shareware) to save space, and reduce the download/upload time.

If you have registered RiadaConvert, by using a credit card, you may be eligible to take advantage of *Riada Refunds*, when distributing the software.