Additional Instructions for Vector Version 1·3

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This describes the major areas of *Vector* which have changed from version 1·1 to 1·3 (in case you were wondering, version 1·2 was produced for the German market only and was never released in an English version). In addition to the changes described here, there have been some bug fixes and enhancements to make the application fully compatible with newer machines and operating systems.

You should note that *Vector* is now no longer compatible with RiscOS 2. If you are still using this version of RiscOS then we (and Acorn) would strongly suggest that you upgrade.

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RiscPC support

Various areas have been changed to work correctly with newer versions of the operating system and to support the enhanced graphics capabilities of the newer machines. *Vector* should now operate correctly with large high-resolution screens in any colour depth; all dialogue boxes and menus have been reformatted to be correctly aligned when the desktop is using an outline font; and memory for documents is allocated from a dynamic area if possible in order to improve task switching performance and allow larger amounts of memory to be used.

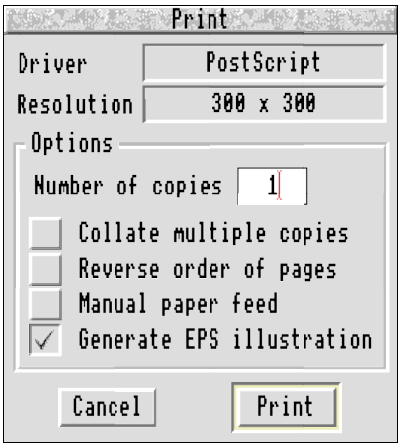
Using the system colour picker

If the system colour picker is supported by the operating system (i.e. RiscOS 3·5 and later) then it can be used for all colour selections instead of the standard 4Mation colour selector. This option is controlled by the "**RiscOS colour picker**" option in the "**Choices**" dialogue box: if it is selected (changing the option takes effect immediately) then the system colour picker will be used if possible. If this option is not selected or the operating system does not support the colour picker then the standard colour selector dialogue will be used.

Enhancements to printing

The printing system now declares fonts to the PostScript® printer driver, in order to generate correct output and to interface with *FontPrint*. Background printing (if supported by the printer driver and requested in *Printers*' "**Connection**" dialogue) is implemented.

There is an additional button in the "**Print**" dialogue "**Generate EPS illustration**", which is enabled if the printer driver supports it. Selecting this option causes Encapsulated PostScript output to be generated: the precise effect of this depends on the printer driver.



Sprites and palettes

Due to changes in the way the operating system handles colours and sprites, it is necessary to ensure that all sprites with 16 colours or less which are to be displayed in their true colours include a palette. Sprites without a palette are displayed using VDU colours, as opposed to desktop colours (i.e. the same as would be seen in *Paint* with its "**Use desktop colours**" option turned off).

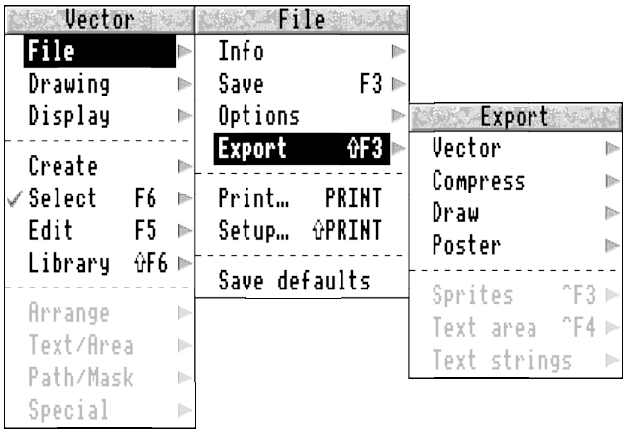
When loading a sprite with this number of colours and no palette, you will be asked whether a palette should be added. For a sprite which is normally displayed on the desktop (e.g. an application or file type sprite) you should answer "**Yes**" to this. Note that sprites captured from the screen normally include a palette.

Quick copy

In addition to the normal copying facilities ("**Copy**" in the "**Select**" menu, keystroke **Control-C**), selected objects can be copied by pressing the **CTRL** key and dragging them to a new position with the **Select** mouse button. The **CTRL** key must be held down as you start to drag, although it can be released once the objects start to move. While the **CTRL** key is held down, the Select mode arrow pointer will show a '+' to remind you that quick copy is in effect; while dragging the copied objects the hand pointer will show a '+'. To abort the copy, press the **ESC** key before releasing the mouse button.

Menu changes

Some of the menus have been rearranged in accordance with the Style Guide. The "**File**" menu leads to document information, saving and printing options, while the "**Drawing**" menu controls settings affecting the drawing file as a whole. These replace the "**Misc**" and "**Save**" menus in earlier versions.



When a file is loaded, its format (*Vector*, Compressed *Draw*, *Draw* or *Poster*) is remembered and displayed at the top of the toolbox (and in the "**About this file**" information box). The "**Save**" option in the "**File**" menu saves the drawing in this format: if automatic save is enabled, it will also automatically save in this format. The current format can be changed in the "**Options**" dialogue: if changed, this format will be used for all saves from then on.

The entire drawing, or selected objects, can be saved in any other format by using the "**Export**" menu. Saving using one of these options does not change the current file format, the modified state or the remembered file name. The equivalent keystroke (**Control-F3**) will pop up an "**Export**" dialogue for the current file format. Sprites, text areas or text strings are also saved from this menu.

The option for setting the format of a saved library file has also been eliminated. Any format of library file can be loaded; it is always saved in the format it was originally loaded in. When the application is started, or the library is cleared, the format is set to to compressed. Merging a library does not affect the format.

The effect of this is that libraries created in *Vector* (version 1·20 and later) will always be in compressed format, whereas if old libraries are edited in *Vector* they will remain in their original format. To convert an old-format library into compressed format, clear the library and then drop the old library file onto the library window or scrolling list (not onto the icon bar icon). When the library is saved, it will be in compressed format.

In addition, the "**Preferences**" option on the icon bar menu has been renamed to "**Choices**" in accordance with the Style Guide.

Saving Draw files

When saving or exporting a file in anything other than *Vector* format (i.e. *Draw*, Compressed *Draw* or *Poster*), it is automatically converted to standard *Draw* format while saving. This means that any file, even if it contains special *Vector* objects such as replicates or multi-line text, can be saved in a form that will be understood by any other application without having to first convert it using *Flatten*.

We recommend that you keep a master copy of the file in *Vector* format so that your saved settings and any special objects are retained. When you want to transfer the drawing to another application (e.g. to embed it in a DTP frame), simply load the file into *Vector* and then drag the file directly from the appropriate "**Save as**" box in the "**File/Export**" menu. (The two examples in the "Multi-line text" section were imported this way).

Measurement entry and display

All measurements are displayed with a unit suffix: when entering or changing measurements, a unit suffix can be added to specify a unit or override the default. The default units are set in the "**Rulers**" dialogue; the units which can be used and their suffixes are:

kilometre	km
metre	m
centimetre	cm
millimetre	mm
mile	mi
yard	yd
foot	ft
inch	in
pica	pi
point	pt

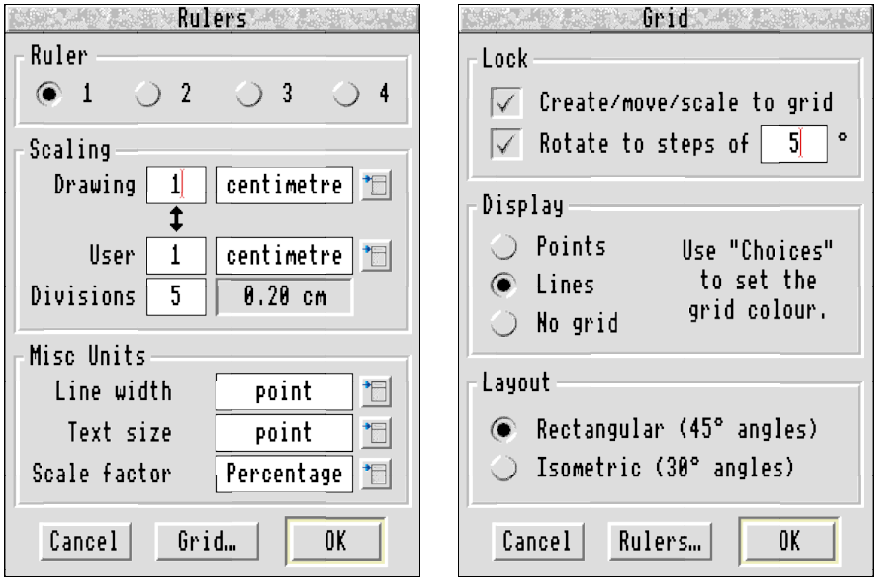
The units used for display and entry of text size and line width are set independently, in the same dialogue. These are not scaled in accordance with the user units.

Scale factors (object scaling, text aspect ratio, etc) are displayed and can be entered either as a percentage (followed by a '`%`'), or as a decimal fraction (including a '`.`'). The display format and the default interpretation (used if a value entered neither ends with a '`%`' nor contains a '`.`') can be set in this dialogue.

New dialogues

The 3-D style is available for all of the dialogues, as well as the toolbox and other windows. If using an older machine (earlier than RiscOS 3·5), *NewLook* must be used to activate this feature. The old 2-D templates are still available (and are automatically used if *NewLook* is not used or has been turned off).

In order to reduce the size and complexity of the "**Rulers**" dialogue, it has been split into two dialogues "**Rulers**" and "**Grid**". The dialogue is opened in the same was as before: the "**Grid...**" or "**Rulers...**" button at the bottom of the dialogue switches between the two and the "**OK**" button works in the same way in either. The "**Rulers**" dialogue controls the current ruler number, the user and drawing units and scaling, the grid subdivisions and the miscellaneous units (see above). The "**Grid**" dialogue controls snapping (independently for rotation and for other operations), the grid display and the grid style.



The "**Choices**" dialogue has also been split up into "**Options**" for setting general options, and "**Colours**" for setting display colours. The "**Colours...**" and "**Options...**" button at the bottom of the dialogue box switches between the two, and the "**OK**" and "**Save**" buttons work in the same way in either. Some new options have been added to the "**Options**" dialogue (see other sections).

Rotation snapping

Rotation can now be confined to a user-defined step, set in the "**Grid**" dialogue. The rotation step is set in degrees: if the option is selected then object rotation with the mouse will be performed in multiples of this angle. If the option is deselected then rotation will be completely free with no constraints.

If orthogonal constraint is selected then this will take preference over the rotation step (i.e. rotation will be constrained to steps of 45° for a rectangular grid or 30° for an isometric grid).

This option has no effect on rotation performed via the "**Rotate**" dialogue.

Saved settings

The internal representation of some settings (text line spacing, grid style and orientation) as stored in the document has changed. When loading a drawing which was created using an older version of Vector, these settings should be checked and reset if necessary.

Any Acorn settings objects found when loading in a file are silently discarded. The warning message is no longer given.

Alignment

The "**Align**" facility can be used if the selection includes a single locked object. In this case, the locked object is used as the reference and all of the other selected objects are aligned to it.

When aligning to a horizontal or vertical centre, the alignment reference point used will be the centre of the object which is nearest to the centre of the selection (previously, the reference point was the centre of the overall bounding box of the selection). The effect of this is that this object will stay still and all of the other objects will be aligned to it, thus preserving the grid positioning of the objects (previously, if the centre of the selection was not on the grid then all of the objects would be moved off the grid).

Polygon create

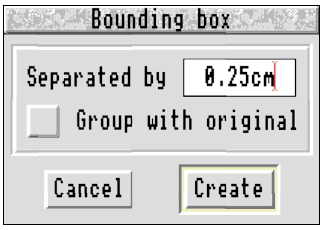
The number of sides for the created polygon is set in a dialogue box rather than a writable menu: this can be summoned by clicking **Adjust** on the toolbox icon. The polygon being created is shown on the screen: the orientation can be controlled by the mouse as the polygon is dragged out (one corner of the polygon follows the pointer).

Draw file checking

Draw files which may have previously failed to load with error 112 ("`Path has no line or curve elements`") can now be loaded: any offending objects are ignored. Some applications (e.g. *EarthMap*) produce files with this error: the appearance of the drawing is not affected, and these files can now be loaded and displayed.

Bounding box

The "**Bounding box**" writable menu is now a dialogue box, and there is an additional "**Group with original**" option. With this option off, the dialogue works in the same way as before. With this option selected, the new box object will be placed immediately behind the original object and grouped with it. The option is available if one and only one object is selected.



Manipulating skeletons

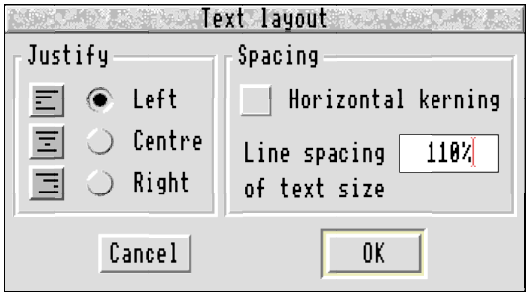
A static-skeleton can have its size and layout changed, or it can be converted to a dynamic-skeleton, using the "**Replicate**" dialogue: this works in the same was as for replicates, except that some operations are obviously not available.

Multi-line text

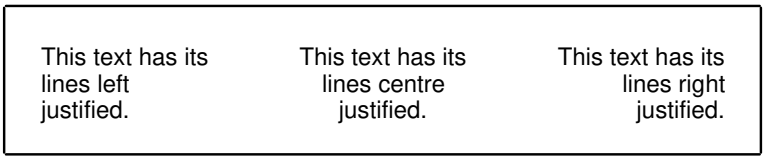
Text objects containing more than one line of text can now be created. This allows a block of text to be kept together, and yet edited in a single operation (which would not be possible if the text were created as individual lines and then grouped). A multi-line text object can be edited, moved, copied, scaled, transformed or have its style changed in exactly the same way as a normal text object. It can be converted into individual lines of text using the "**Explode text**" option on the "**Special**" menu: it can also be converted to a path.

A text object is created or edited in the same way as before. Two options are available for multi-line text objects, depending on your preference. In the normal mode, pressing the **RETURN** key during text entry or editing completes the create or edit (and starts a new text object, if in text create mode) in exactly the same way as before. To start a new line within the same text object, press either the **INSERT** or the **TAB** key: the caret will move down to the next line. The alternative mode is available if the "**Multi-line text**" option is selected in the "**Choices**" dialogue (changing this option takes effect immediately): in this case the action of the keys is reversed so that **RETURN** starts a new line of text and **INSERT** completes the create or edit. In either case, clicking **Select** always completes the create or edit.

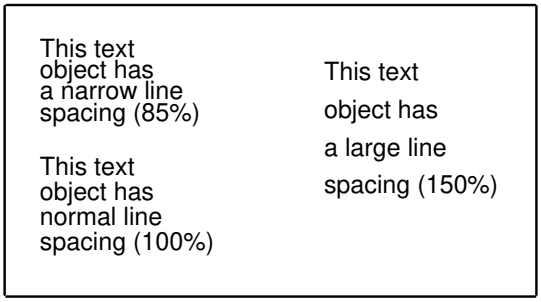
Text layout is set by the new "**Text layout**" dialogue in the "**Text/Area**" menu, which replaces the "**Line spacing**" and "**Kerning**" options originally on that menu:



The three "**Justify**" options set the alignment of the text, both for normal and for multi-line text objects. For a normal text object, changing the justification does not change the appearance of the text (except that its position will change); however, the effect will be obvious if the justification is changed and the text is later edited. For multi-line text objects, the option affects the alignment of each line with respect to the others:



This dialogue box also allows the line spacing to be set (for multi-line text objects), as a proportion of the text height:



Horizontal kerning (if the font in use includes kerning data) can be selected for any text object.

In addition to the two options above, the actions of some keys during text edit or create have been changed to work with multi-line text objects (if only normal text objects are being created, these keys work in the same way as before). **Control-Left** and **Control-Right** move to the start or end of the current line; **Control-Up** and **Control-Down** move to the start or end of the text. If not at the end of a line, **Control-Copy** deletes forwards from the caret position to the end of the line; if at the end of a line, it deletes the newline and joins the next line to the current one. If not at the start of a line, **Control-U** deletes backwards from the caret position to the start of the line; if at the start of a line, it deletes the newline and joins the current line to the previous one. **Control-X** deletes all of the text.

Selection options

Three options are now available (in the "**Choices**" dialogue) to determine how objects are selected when a box is dragged to enclose them: this can be changed for personal preference or to make the selection more or less sensitive if required for a complex drawing. Changing the option takes effect immediately.

If "**Touch**" is chosen, any object whose bounding box touches or intersects the selection box will be selected (this was the original behaviour in *DrawPlus* and *Vector* if "**Select all touched**" was chosen). If "**Centre**" is chosen, then if the centre of an object's bounding box falls within the selection box then that object will be selected (this is the standard operation in *Draw*, and the original behaviour in *DrawPlus* and *Vector* if "**Select all touched**" was not chosen). If "**Enclose**" is chosen, only objects whose bounding box is entirely enclosed by the selection box will be selected: any object larger than the selection box will not be selected at all.