

RHAPSODY 4

Require RISC OS 3.1 or later

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1. Introduction

Rhapsody 4 is a powerful music composition and transcription tool for Acorn RISC OS machines. Using Rhapsody 4 you can create and manipulate complex musical scores, play music on or record from a MIDI instrument (with support for General MIDI) and produce a high quality printout of all or part of the music.

Rhapsody 4 has been substantially re-coded since the release of Rhapsody 3 to allow for increased flexibility, but care has been taken to keep the user interface easy to use and broadly consistent with earlier releases so that new users, as well as those experienced with previous releases of Rhapsody, can quickly create their own music.

Rhapsody 4 requires Risc os 3.1 or later plus 4MB of RAM and we recommend a machine fitted with at least ARM 3 in order to obtain satisfactory performance.

We do not recommend Rhapsody 4 for use with A300, 400, 3000, 3010, 3020 or A4000 computers. It will work on these computers but it may be slow.

Font cache

Ensure that you have an adequate font cache configured. If the Rhapsody screen update is slow then you probably need to assign a larger font cache using !Configure, or press F12 and type *CONFIGURE Fontsize 256k

Typographic conventions

- Special terms or jargon appear in italics when first introduced: '*Bank numbers...*'
- Instructions to press a key on the keyboard, or a mouse button, are

shown in fixed width font eg Return. This means press the Return key on the keyboard.

- Menu options that may be selected are in sans-serif font: '*Click on Print to...*' means choose the option called Print from a menu.
- Menu options which lead to sub-menus have an arrow after them: Stave >
- Options in dialogue boxes or options in windows are in sans-serif font: Cancel
- Something important always appears in bold.
- Worked examples have italicised headings: " *Example..*"
- separate points, or different ways of doing the same thing, are bulleted: ●●●.
- Actions which should be performed in order are bulleted with numbers: ①②③

Conventions used in this guide

We use the standard Acorn conventions for the mouse buttons:

Select is the left button, and the most commonly used.

Menu is the middle button and is used primarily for opening menus.

Adjust is the right mouse button.

Unless otherwise stated, **Choose** means move over something and click on it with **Select** or **Adjust**.

Inserting a disc into the floppy disc drive and clicking on the disc drive icon is known as mounting the disc. The disc's directory display appears after you perform this operation.

Error or message dialogue boxes may appear from time to time. When they contain two action icons (coloured cream) clicking OK will continue with the operation. CANCEL will abort it.

It is assumed that you have read the welcome Guide supplied with your computer and are familiar with the RISC OS Desktop environment.

The Future

The product you hold in your hands is 'finished' to the extent that it contains no Known bugs. However, we have plans for enhancements to this software. If you have any constructive criticism or advice then it will be most welcome. Please send any such ideas or requests in writing to clares via post or email.

ReadMe

A file called ReadMe is supplied on the disc. This gives up to date information that has arisen since this manual was printed. The file is in text format and should be loaded into Edit, which is supplied with your computer

Initialising Your Program Disc

You must initialise your disc before installing the software. You cannot backup this disc.

The first time that you catalogue the Rhapsody disc you are required to go through an initialising procedure. A box pops up asking you to enter your name and address details. When you have entered these correctly the program is initialised and the disc is automatically installed. Each single user version is supplied with two credits that allow two installations of the program. One should be kept as a backup. The application can be de-installed to regain a credit by running the installer and dragging the application icon onto the installer window.

Note: The details that you enter into the box will be shown each time you run the program but the box then disappears once a certain action is carried out within the program, or a time has elapsed. It is important that you enter the correct details when initialising your disc as we will only return discs or provide upgrades to the address given on the disc. If you return a disc to us for any reason we will automatically read off the details from the disc and return it to the specified address.

Hard disc installation

This is done using the Installer by dragging the Rhapsody 4 icon from the Installer window into the relevant directory viewer. All associated files are automatically installed for you.

If you wish to use Rhapsody 4 in conjunction with other programs it may be sensible to have all of these applications in the same directory, or available on the Pinboard.

!R4Convert

This application will convert Rhapsody 3 files to Rhapsody 4 format. When the application is run you click on the icon bar icon to open a window. Create a new directory to hold your converted files and drag it to the top

writable icon in the window. Now drag the files or directories to be converted onto the middle section of the window and click on OK.

Rhapsody 4 files contain a lot more data and so are larger than Rhapsody 3 files. Make sure that you have enough space on your disc to store the new files.

BubbleHelp

BubbleHelp is a utility by David Pilling. It is similar to the Acorn lHelp utility but is a lot more friendly and easier to use. To use it double click on the icon. It can be toggled on and off by clicking on the icon bar icon on the right of the icon bar.

PlayMidi

PlayMidi is a simple MIDI file player. See the Help file for more information.

Please note that this application is a give away and is not supported.

2. Getting started

What do I need?

To run Rhapsody 4 you need an Acorn machine fitted with RISC OS 3.1 or above and a minimum of 4 megabytes of RAM. However, we do advise a minimum configuration of an ARM 3 machine or A7000, A7000+ or RiscPC. Whilst Rhapsody 4 will run on earlier machines you may find the speed too slow due to the use of high quality anti aliased fonts for displaying the music. At least one reviewer has said that he finds Rhapsody 4 acceptable on an A3000.

Short Tutorials

To get you into Rhapsody as quickly as possible, this chapter will tell you how to

- load and play an existing score
- create a new score
- add notes to an existing score
- add a new stave
- save a score.

Chapter 3 will show you how to

- 1 copy and edit whole blocks
- 2 enter music direct\$ from a MIDI keyboard
- 3 add lyrics and other marks to your score
- 4 print out the finished score

Loading and playing an existing score

Run Rhapsody 4 by double clicking on the IRhapsody4 icon in the

directory display. The Rhapsody 4 icon will then appear on the icon bar. To open a new score window click on the icon with Select. Adjust opens just the Main Panel.

Once you have loaded Rhapsody, you can load in a score by dragging its icon from a Filer window onto the Rhapsody icon on the icon bar, or onto a score window.

For now, try loading in one of the new demonstration files supplied on the Rhapsody 4 disc. The score will appear in a new window if you dragged the file onto the iconbar icon; otherwise, it will appear in the score window you dragged the file onto. If this window contains a (non-blank) score already you are asked if you want to overwrite it.

Now you have a tune, you can play it. Click anywhere in the score with the Menu button and select Play from...) Start. Rhapsody checks to see if you have a MIDI interface fitted, and if you have, plays the score through it; otherwise, it will use the computer's internal sound system.

The sample scores provided on the Rhapsody 4 disc have been set up to conform to General MIDI; if you have an instrument compatible with this standard you will be able to hear these scores played on the correct instruments and create new scores using the instrument names provided.

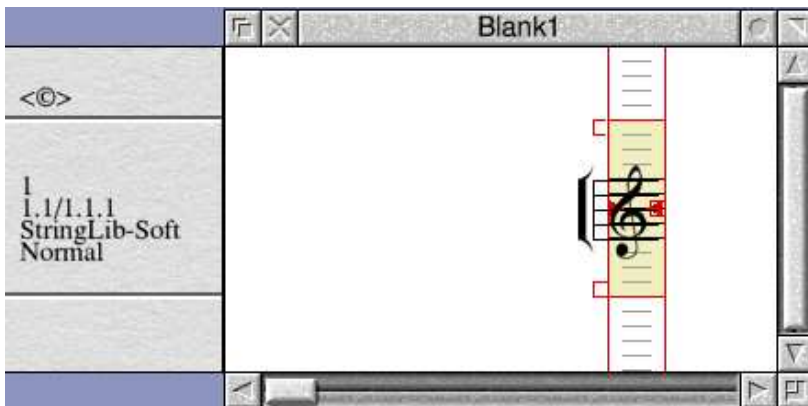
If your MIDI instrument does not support General MIDI, you may need to change the voice numbers on the staves to make it sound right, and Rhapsody will not get the instrument names in its windows right until you tell it how the different voices in your instrument are laid out. For further information see these sections:

- altering a stave - page 102.
- customizing Rhapsody to cope with your setup - page 137.

Creating a new score

In this tutorial we shall input and edit a simple tune. The example used here is an old folk song, but you can put in any tune you like.

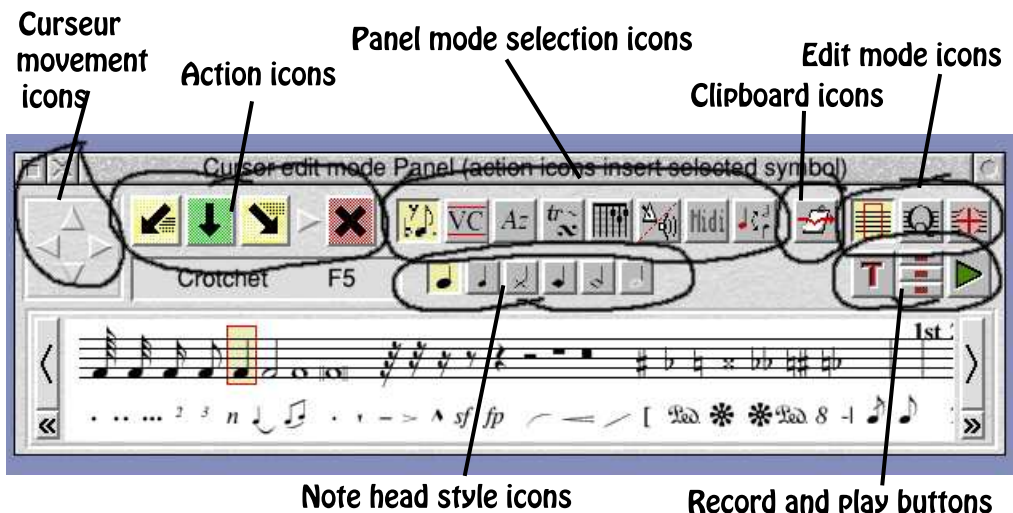
If Rhapsody is not already running, load it as above and bring up a new score window by clicking on the icon bar. A window like this appears:



Blank score

To begin with, the score contains nothing but a treble clef, on a single staff. The yellow box is called the cursor and this is where all editing is done. On the left of the staff some useful information about the staff is listed including its name, MIDI channel information and the name of any internal voice associated with the staff.

In addition to the score window, the main panel appears as well. Let's pause a minute and have a look at what it offers.



On the left at the top are four arrow icons which move the cursor left and right and also move the red arrows up and down.



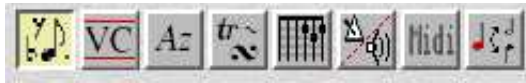
On a blank score, you can move the arrows up and down but the cursor will not move left or right because there is nowhere for it to go. Try it. Naturally, the cursor keys on the computer keyboard do the same thing.

Next along is a group of coloured keys which enable you to enter and delete symbols in a score.



We shall be using these a lot.

The third group controls what appears in the lower half of the panel. Make sure that the leftmost icon is selected - the one that selects all the notes, rests and all the other musical symbols.



On the right hand side are three buttons which corresponds to a different mode, or style of editing. In this tutorial we shall use Cursor edit mode. This is the default state of affairs, and if you are using Rhapsody 4 for the first time the panel should be in this mode already. (The current mode is shown on the title bar as well as being reflected in the buttons.)



Tucked in between these two groups of icons is the clipboard icon, but we shall not be needing this yet.



Underneath the edit mode buttons are the Transcribe, Record and Play buttons.

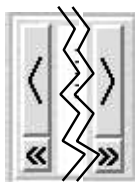


and to the left of them, a group of note head style icons



Most importantly of all, of course, is the display of musical symbols in the lower half of the panel. This contains nearly 200 symbols and it is not

possible to show them all at once so this part of the window is scrollable. At the ends of the window are two sets of button icons shown below:



If you press and hold the **Select** button over one of the larger upper icons, the window scrolls smoothly in the direction of the arrow. To move the window a 'page' at a time, click on one of the small buttons at the bottom. In both cases pressing the **Adjust** button scrolls the window in the opposite direction. Another way to scroll the window is simply to drag it using the **Select** button. (Press the **Select** button while the pointer is anywhere in the window and hold it down while you drag the mouse, and the window, from side to side.) In fact, if you release the button while the mouse is moving, the window carries on scrolling for a while so you can't 'throw' it from one end to the other when you get skilled at it!

Now we are ready to enter some music.

Entering musical symbols

The tune is a very simple one called 'To A Wild Rose' by MacDowell. Here are the first four bars.



It is in the key of F major and so the first thing to do is to add an appropriate key signature. (We shall add the bass stave later)

Key signatures are not required very often except at the start of a piece so they will be found towards the right hand end of the symbols window.

F major has one flat so this is the symbol that we need. Click on it and it will be highlighted in yellow.



(If you want to select a key but you do not know how many sharps or flats it has in it, you can simply press the appropriate letter on the computer keyboard. If the key is too complicated eg Eb minor, you can try each key signature in turn until the right name appears in the information window below the action icons)

To insert the key signature into the score, click on the Insert-After button.

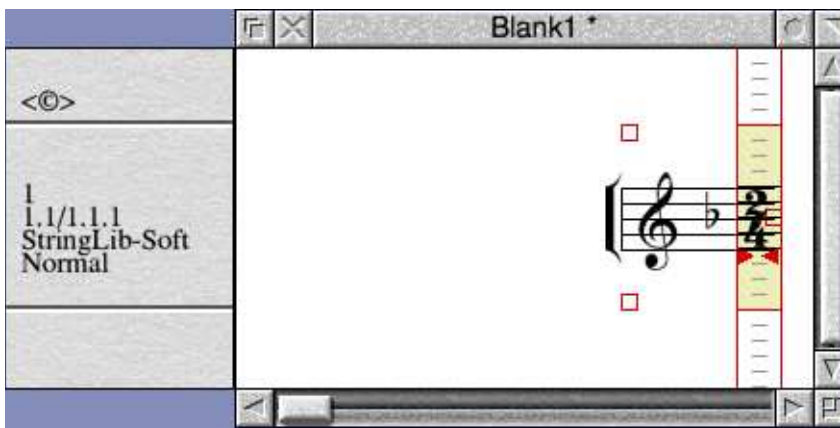


What this does is to insert the selected symbol into a new slot immediately to the right of the cursor. You will often need this button when entering the first stave of a blank score. It has a keyboard shortcut - the full stop key (which also has a > sign on it to remind you that the cursor moves one slot to the right.)

This tune is in 2/4 time, so the next thing we need to do is to enter a time signature.

The time signatures are at the very end of the symbols window. Click on the 2/4 time signature and then click the Insert-After button again.

This is what your score should look like now:



To enter the notes of our tune, you need to add them one at a time to the end of the score. First, move the symbols window back to the left hand side so you can see all the notes. Click on the quaver symbol (...or you could press F4). Now you need to make sure that the red arrows are on the right line of the staff. If they are not on the second space up (an A) move them either with the cursor movement icons in the top left hand corner of the panel (...or with the cursor keys on the computer keyboard). When they are correct, click on the Insert-After button (...or press the full stop key). The next note is also a quaver so move the cursor up two notches and insert again. The next note is a crotchet, so select a crotchet (...or press f5) and insert again. This time, Rhapsody will recognise that the bar is full and automatically put the barline in for you.

Carry on in this way, selecting, moving the cursor and inserting until the line is complete. Try using the keyboard short cuts as well as the mouse. This is what you are aiming for:



If you find that you have made a mistake, you may want to delete a note. To do this, place the cursor over the note in question and click on the **Delete** button:



(The keyboard short cut for this is the slash key - which also carries a ? mark).

Note that the red arrows do not actually have to be on the note you want to delete.

Rhapsody deletes the nearest note - so if there is only one note on the stave, it doesn't matter where the red arrows are. (Note that when deleting a symbol, you should in general select the type of symbol that you want to delete first eg any note or any rest. This is to avoid ambiguity. If Rhapsody can't guess what you want to delete, it will beep at you.). To reinsert the note, select the right note value - crotchet or quaver, as before - and then click on the **Insert-At** button:



(The short cut for this button is the **Space Bar**)

Instead of deleting a note, you can also *drag* it. Point exactly at the note you want to drag and hold down the **Select** button for a second and a red note head will appear. Carefully move it up or down to the correct position and let go. Notes (and indeed just about anything else) can be moved (using the **Select** button) or copied (using the **Adjust** button) anywhere in a score - even into another score if you want.

Adding a new stave

Now we need to add a new stave. What is more, the new stave must be underneath the first one. Click on the score somewhere underneath the first stave using the **Menu** button. Then choose **Stave "" ▾ Add stave** from the

menu as shown below.

Rhapsody	
Score "Blank1" ▶	Stave
Stave 1 ▶	Add stave ▶
System ▶	Alter stave...
Block ▶	
Format ▶	Re-tail ▶
View ▶	Transpose ▶
	Copy ▶
Go to ▶	Clear ▶
Play from ▶	Delete
Play options...	
Capture ▶	
Transcribe...	

Now the score will look like this:

☐

☐

You will notice that Rhapsody has guessed that you need a bass clef. It will normally give you a treble clef unless you ask for an extra stave at the very bottom of the score. Of course, you could always change the clef if you wanted to. It has also copied the key signature and time signature from the

stave above.

Adding notes to an existing score

Adding notes into an already existing score is a little bit different from adding notes to the end because the slots into which the notes must go already exist. First put the cursor on the new stave at the correct position (the second line down) and select the minim symbol (or press **F6**). Now click with the **Insert-At** button using the **Adjust** button on the mouse.



This will insert a minim with a **down** stem **without moving the cursor**. Note that if you had used the **Insert-After** button, Rhapsody would have pushed all the subsequent notes along which is not what we want. Using the **Adjust** button instead of **Select** inserts a down stem instead of an up stem.

Move the red arrows up to the next line and click **Insert-At** again. Add the third minim in the same way. Now move the cursor to the beginning of the next bar and add the next chord. The other chords can be added in exactly the same way. The last chord has an accidental in it - a B natural. Enter the notes (3 minims) first without the accidental, then select the right symbol (a natural sign in this-case) in the symbols window (or press **Ctrl-F3**) and click on **insert-At** with **Select**.

Playing a score

Now that the first four bars are complete, you can play it. Put the cursor at the start of the score and click on the **Play** on the main panel (or press **Ctrl-p**).



Alternatively choose Play from ► Start on the main menu, as before.

Since you have not set any other options for this stave, Rhapsody will play it through MIDI port 1, channel 1 if you have a MIDI card (make sure your instrument is for the moment set up to receive on channel 1); otherwise, it will use the computer's internal sound system.

You will probably agree that the score plays far too quickly. This is because we have not yet entered a tempo command. To do this we need to change the panel mode by clicking on the tempo/volume select icon.



This changes the lower half of the panel to look something like this.



Make sure that the 'Imm.(ediate)' option and the Metronome buttons are selected.

Click on the '72' button. This sets the tempo to 72 crotchets per minute.

Now put the cursor at the very beginning of the score (ie click over the treble clef).

Finally, click on the Insert-At button. When you play the score now, it will play at the right tempo.

Saving a score

You can save your work by following Score ► Save ► on the main menu; choose a suitable file name and drag it into a Filer window as normal.

In the next chapter we shall look at some other ways of entering and editing your score and we shall use them to enter the rest of the piece.

Note: Unfortunately Rhapsody needs to use all the function keys to provide keyboard input. This means that F3 is **not** available for bringing up the Save box. Much discussion went into this decision and although it contravenes Acorn guidelines we came to the conclusion that it was more important to maintain consistency in the selection of notes.

3. Next steps

So far we have entered the first four bars of the piece, 'To a Wild Rose'. Here is the complete piece of music we want to enter.



See if you can enter the next four bars using the mouse and the keyboard. If you are beginning a new session, you will need to double click on the file that you saved. This will start Rhapsody and load the file but it will not bring up the Main Panel. To do this, either choose Show main panel from the icon bar menu or put the cursor in the score and then press the **TAB** key on the computer keyboard or click on the Rhapsody 4 iconbar icon with **Adjust**.

Now to start entering more notes. First put the cursor at the end of the score on the upper staff. Use the cursor movement icons or the cursor keys to put the red arrows at the right pitch; select the quaver symbol (F4) and click **Insert-After** (or press the full stop key).

Remember to use the **Select** button to insert a note with its stem pointing upwards and the **Adjust** button to insert a note with its stem pointing downwards. If you want to change the direction of a note stem (eg most of the notes in the first four bars!) the simplest way is to place the cursor over the note and press **Ctrl-S**.

There are two ways of entering the dotted crotchet at the end of the eighth bar.

You can either insert a crotchet in the normal way, then select the single dot symbol and use **Insert-At** to add it to the crotchet, or you can select the crotchet symbol in the usual way, then, before you insert anything, select the dot symbol using the **Adjust** button. This adds the dot selection to the selected note.

Now when you click **Insert-At** you will enter a dotted crotchet. (A number of other symbols can be attached to a note in the same way including triplets, ties, accents and accidentals.) Because dotted notes are so common, you can select it immediately with a *double-click* on the symbol or pressing the function key twice.

The quaver rest at the end of the bar is entered just like a note. (Again, you can select dotted or triplet rests just like notes too)

When the first eight bars are complete, play it through to see what it sounds like.

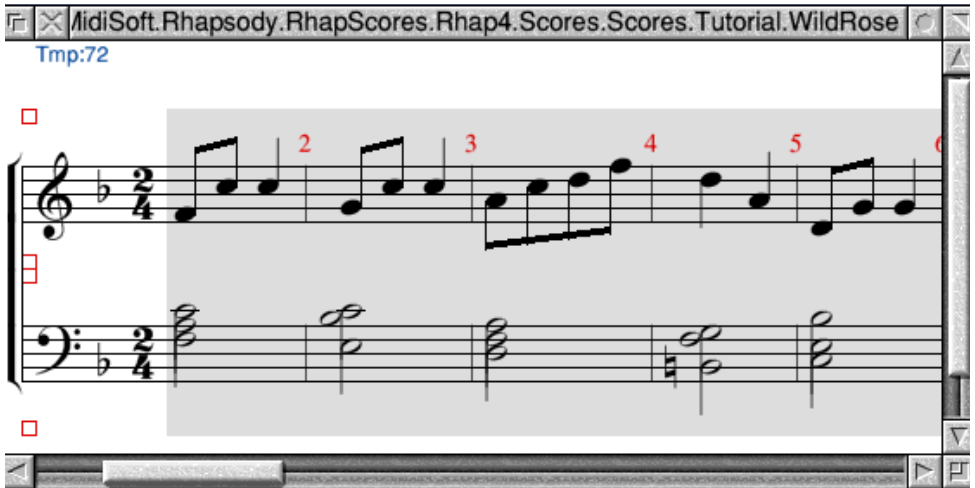
Copying a block

If you look carefully at the music you will see that the second eight bars are very similar to the first eight, the only differences being in the 12th 13th and 14th bars.

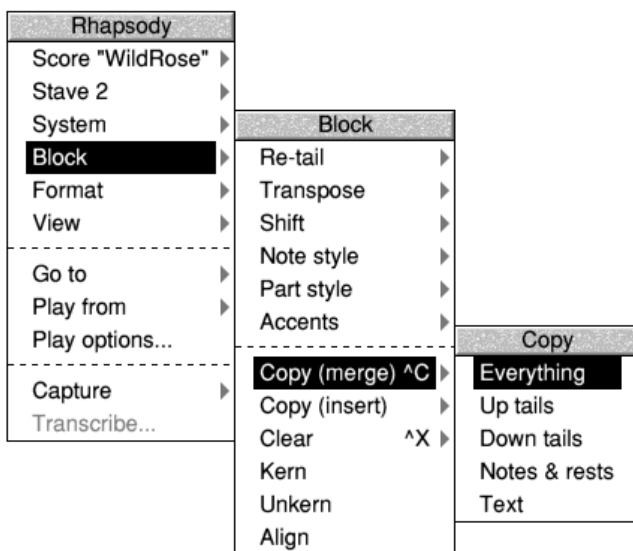
We can save ourselves a lot of time by copying the first eight bars and then editing the notes which need changing. To do this, we must first mark a block by *double clicking and dragging*. To select the whole score click twice on the very first note of the score and hold the **Select mouse button down**. The pointer will change into the 'block' symbol and a dashed marker box appears. Still holding the mouse button down, drag the box out until it covers the whole score. (Since the score is too long for the screen, it will scroll automatically as you approach the edge of the screen.) When you release the mouse button, the score will be reprinted with a grey box showing exactly what has been selected. (if you release the button too soon, you can alter the right hand end of the

selected area by *double-clicking* on the new position with Adjust).

Now we must place the cursor at the point where the copy is to go. This is at the very end of the score. Be sure to put the cursor on the top staff. Your screen should now look something like this:

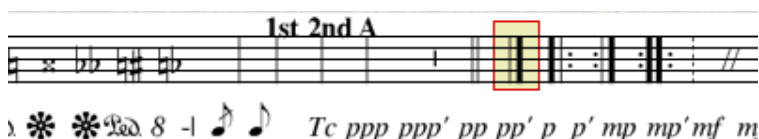


Now all we have to do is press Ctrl -C. Alternatively, you can use the Block > Copy > Everything menu item.



To change the notes that need changing, you can either delete the old notes and insert new ones, or you can drag the old notes to their new positions. To do this, place the pointer over the note and hold down the **Select** button until the pointer changes to a red note head. Now move the pointer up or down to the correct position and then release the button. Remember to use **Ctrl -S** if you want to change the stem of a note.

One final problem concerns the end of the score which looks a bit untidy. Every piece of music should end with a special double barline which you can find in the symbols window here:



Select it and enter it at the very end of the score (ie after the last barline)

using insert-After). Now we no longer need the ordinary barline that the copy routine put at the end of the score so we should go back one space and delete it. (Note that you can't delete the old barline first because Rhapsody will automatically put it back in again!)

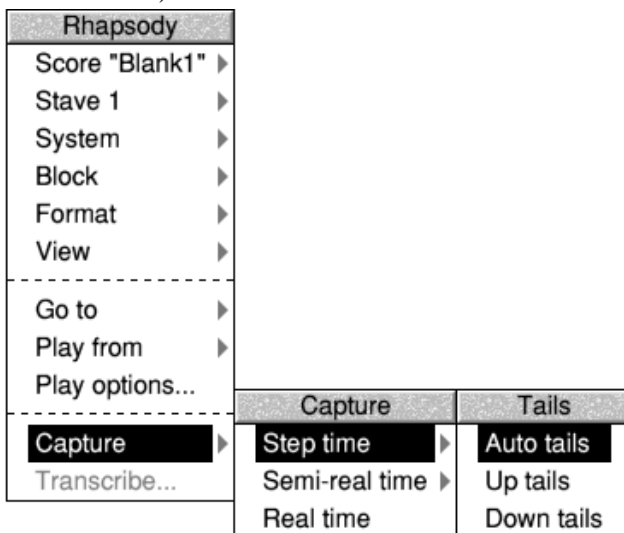
An error ?

Sharp eyed users will note that the last bar on the first stave on page 19 does not have a rest. If you have entered the last eight bars by hand instead of using the copy function you should see an error box warning you that there not enough notes in the last bar.

Entering notes from a MIDI keyboard

If you do not have a MIDI keyboard, you can skip this section. On the other hand, if you do have a MIDI interface and a keyboard connected, you can enter notes much more quickly.

To try it out, click on the Rhapsody icon on the icon bar to bring up a new blank score. Put the cursor at the start of the score. Now choose Capture ♦ Step time ♦ Auto tails from the main score menu. (The short cut for this is **Ctrl -@**).



The cursor will turn orange. This indicates that you are now in **Step capture** mode. Any note that you play on the MIDI keyboard will now be sounded and entered into the score immediately. The note's length is determined by which note type is selected in the panel; the pitch is determined by the note that you played. If notes do not appear in the score when you play notes on the MIDI keyboard, check the connections between the keyboard and the computer, check that your keyboard is set to output MIDI information and check that your MIDI interface is set up correctly.

If notes appear in the score but no sound is heard, then (assuming that your amplifier/speaker system is working) you need to do one of two things. Either switch your keyboard to **Local On** (see your MIDI keyboard manual for this), or use Rhapsody's **MIDI Thru** facility. This can be found on Rhapsody's iconbar menu. For more detail on this subject, see page 145.

Printing a score

If you would like a printed copy of your score, you must format it first. This provides Rhapsody with information on how large the page is and what scale the score is to be printed at. This enables Rhapsody to work out where to put the ends of the *systems*, that is, printed music's equivalent of the lines on a page. Systems are often wider than one stave, and for large works can cover an entire page.

To do the formatting, choose **Format ▸ Create...** from the Main menu. This will bring up a dialogue box with a lot of information which you can ignore for now. Just click on the **Create** button in the bottom right hand corner. A new window will open showing how your score will look when it is printed. Open it out to have a look at it. There are a number of ways in which you can alter and improve the appearance of a formatted score but ignore this for now. Bring up the Main score menu over this new window and choose **Score "-" ▸ print**. This leads to another dialogue box with some more options which you can safely ignore for now.

Assuming that you have a printer connected and the correct printer driver loaded you can now click on the Print button to produce your printed score. Obviously, the better the printer, the better the printout will be. At the time of writing we strongly recommend the Hewlett Packard HP6L laser printer. This is a very fine 600dpi printer at a reasonable cost that will produce scores equal to or better than many printed books. Clares sell this printer complete with a free 4MB memory upgrade (normally £130) for £365 but please check current prices before ordering.

Using MIDI

If you have a MIDI keyboard connected and the results obtained, when you play back a tune from Rhapsody via your MIDI keyboard, are not what you expected then check the following:

- Ensure the correct instruments are assigned to the staves - see page 105
- Ensure Rhapsody is set up for your MIDI keyboard (the default is General MIDI)

see page 144 and also the file, *!Rhapsody4.MidiSetup.FileStruc*. It is also worth looking at the supplied files. The important ones are *Setup* and the files in the *GM directory*.

The required structure is that you need a directory named after your keyboard which contains a *Tones* file, which lists the instruments and their numbers. To make it easier to handle this list is split into logical *groups*. You may optionally have a *Keymaps* file in this directory too.

The Setup file must refer to your keyboard using the directory name.

Once set up you should never need to alter this unless you change instruments.

4. The Basics

Loading Rhapsody

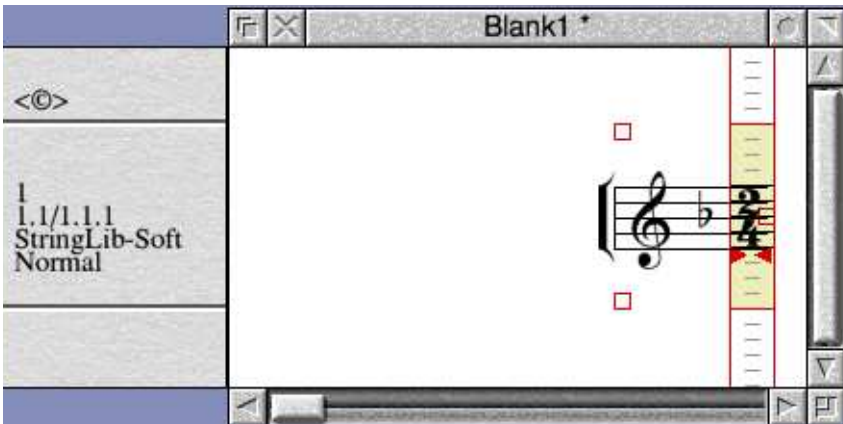
Open the directory display containing the !Rhapsody4 icon



and double-click on it. The icon appears on the icon bar.

Opening a blank score

Click Select on the !Rhapsody4 icon on the icon bar. A score window appears along with the Main Input Panel. Clicking with Adjust opens *just* the Main Input Panel, this is useful if you have a score open and want to open the panel.



This score window is referred to as a blank score, as it contains no symbols except the default treble clef. In the absence of any other information, Rhapsody will assume that the time signature is **4/4**, the key signature is **C major** and the tempo is **120 crotchets per minute**.

You can have as many scores in memory at one time as you like, provided your computer has enough memory to store them all. However, the number

of views you can have open at once is limited to about 30. If you need a new score and have many Rhapsody windows open at once, close some of the existing windows. The scores and views held in them will still be stored in memory, and you can retrieve them using **New view** described below.

Blank scores

Another way to create a new score is to follow **New score** on the icon bar menu. This leads to a submenu of *blank scores*. Selecting any of these will cause Rhapsody to create a new score of that type. The blank scores supplied with Rhapsody correspond to various popular instrumentations (using **General MIDI**).

Opening a new score by clicking on the icon bar is the same as choosing **New score** **Blank**.

Rhapsody keeps the blank scores in the directory **NewScores** inside the **!Rhapsody4** application. You can edit these, or add new ones, according to your needs. See page 143 for more details.

Loading an existing score

To load in a score, you can

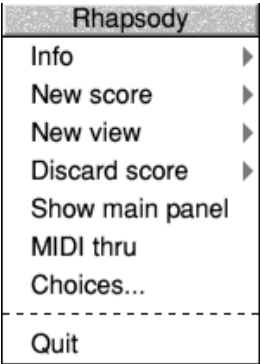
- drag its icon from a Filer window onto the icon bar icon - a new window appears containing the score;
- drag its icon from a Filer window onto a score window - the existing score will be replaced by the new one. If the existing score contains unsaved work you are asked whether you want to overwrite it.
- double click on the file icon - a new window appears containing the score.

Note that Rhapsody 4 has a significantly different file format from older version:

a format which allows for much more flexibility. To reflect this, Rhapsody 4 files have a different file type. In order to load scores created using Rhapsody 1, 2 or .1. or Maestro files, you need to convert them into Rhapsody 4 files using the utility supplied, **!R4convert**.

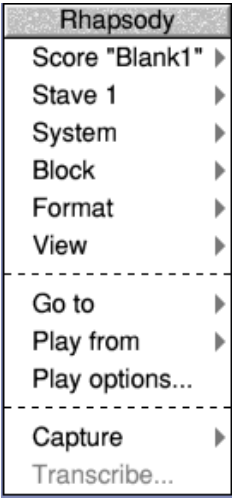
The Menus

Rhapsody has two menu trees. Clicking Menu over the iconbar icon opens the iconbar menu:



This menu is used for options that affect the whole program.

Clicking Menu over a score window produces the Main score menu:



This menu is used for options that affect a single score, or part of the score. Some options affect only one stave, or one system. Clicking Menu over a particular stave and system will produce a menu relating to that stave and system, and to that score (and block within a score, if it contains a marked

block.)

In this manual, the score, stave, block and system that the menu affects will be called the *current* score, etc., to distinguish them from the *cursor* score, etc. The position of the cursor affects only those operations which require a source and a destination. In that case, the destination is always marked by the cursor.

For information on what a System is, see the Formatting & printing chapter. For details of the menu structure, see Appendix A.

Viewing a score

You can have several views of a score open at once. These views can be scaled and scrolled independently of one another. They can also contain the score formatted in different ways.

To open a new window onto a score held in memory, or to retrieve a score whose window has been closed, follow **New view** from the iconbar menu, and select the name of the score you want to view. This option opens the score in the default linear.format - where the window is the length of the score and the height of one system. This format cannot be printed.

To change the format which is displayed in the current score window, without opening a new window, follow **View ▶ Format ▶** from the main menu and select the format required. You can always view the score in linear format but other formats must be created first, before you can view them. See the chapter on Formatting and Printing for more details.

To open a new window of the current score with a view of a different format follow **View ▶ New view ▶** from the main menu and select the format required. The original window stays open. Again, any formats other than the linear format must be created **before** you can view them.

All views of a score are fully editable and changes made in one view will

automatically be reflected in all the other views open at the time.

Moving around a window

Your scores may become quite large. With large scores it is important to be able to move around quickly and easily. You can move the view in a window of a score in two ways:

- using **Select** on the scroll bars to move the view horizontally or vertically, or **Adjust** on the scroll bars to move it in all directions. This follows standard RISC OS procedure.
- using the **Go to** option on the main menu.

The Go to menu

This contains various options regarding the position to move the display to. The options available on the **Go to** menu are:

- **Go to ▶ Start** moves the display to the beginning of the score.
- **Go to ▶ Cursor** moves the display to the position of the cursor, if the current score holds the cursor; otherwise, this option is greyed out.
- **Go to ▶ Bar ▶** moves the display to a particular bar nrrrrrbcr.
- **Go to ▶ Letter ▶** moves the display to one of the rehearsal letters. You have to place at least one rehearsal letter before you can use this option.
- **Go to ▶ End** moves the display to the end of the score.

Scaling a window

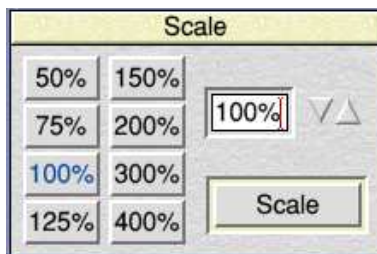
When a window is first opened it shows a view of the score at a scale of 100%. It is useful to be able to change the scale of the window, whether to enlarge it and check small details, or to reduce it and gain an overall view of the score.

Scales above 100% show an enlarged view; below 100%, a reduced view.

Rhapsody can cope with scales as small as 10% or as large as 1,000%. When you change the scale view in a window, the actual size of the score (as sent to a printer or other device) is unchanged. All you change is the size displayed on the screen.

Because the screen mode, the size of your monitor, and any horizontal and vertical adjustments you have made to it, all affect the displayed size and proportions of a score, it is unlikely that viewing a format 'at 100%' will correspond precisely to the size of the score when it is printed. If you require an actual-size preview, you will need to work out yourself which scale to tell Rhapsody to display at, based on the size of your monitor screen, and the screen resolution you use for Rhapsody.

To change the scale at which a window displays a score, follow **View ▸ Scale ▸** from the main menu. This leads to a window:



You can change the scale by

- clicking on one of the preset-scale buttons, and then on the **Scale** button;
- typing a value into the writable icon, and then clicking on the **Scale** button;
- using the bump arrows to alter the scale, and then clicking on the **Scale** button.

Info boxes

There are two Info boxes in Rhapsody:

- following **Info ▸** from the iconbar menu opens a box giving information about the program and the version number you are using.
- following **Score ▸ Info ▸** from the main menu opens a box giving information about the current score. This window is illustrated

below. It tells you the length of the Rhapsody 4 file, the number of bars and notes, and an estimate of the time it would take to play.

Score Info	
Statistics	
Bytes	10748
Notes	265
Bars	117
Playing time	
With repeats	4m 10s
Without rpts	3m 54s

Saving a score

Saving a score Rhapsody allows you to save your work in two different ways: in its own, Rhapsody 4 format, or as a MIDI file. Rhapsody files can be automatically compressed before saving using Acorn's Squash utility. Squashed files should be saved in their own directory as they do not show any filetype information.

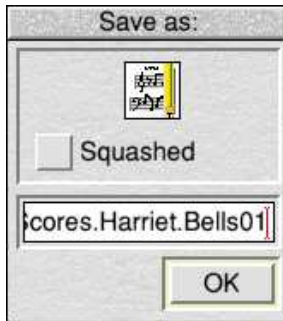
There is also an **autosave** option, available from the **Preferences** dialogue, in which the computer saves your work automatically after a period of time.

Rhapsody 4 files

Rhapsody 4 has a file type of its own which contains all the data relating to a score. This includes all the different formatted versions of the score which have been calculated, as well as all the objects in the score.

This format can only be loaded and saved by Rhapsody 4, as it is significantly more flexible than that used by previous versions of Rhapsody. You can convert your old Rhapsody 1,2 or 3 files into the new format using the application supplied, !R4convert.

To save your work as a Rhapsody 4 file, follow **Score) Save)** from the main menu. A Save box appears:



You can save your work by:

- typing in a name for the score (up to 10 characters long), then dragging the file icon onto a Filer window;
- typing in a full path name in the writable icon, and clicking on the OK button;
- if there is already a full path name in the writable icon, clicking on the OK button will save the file under that name. Rhapsody puts the new path name into the icon for you when you load a score, and when you save it by dragging the icon into a Filer window. This is useful to keep a previously saved score up to date.

Selecting the option button Squashed before saving, saves the file in compressed form.

If you click on the OK button when the writable icon does not contain a full path name, Rhapsody will ask you to be more specific.

MIDI files

MIDI files differ from Rhapsody files in the way they handle music; they are designed purely to cope with playing a score through a MIDI instrument. The advantage of MIDI files is that they are extremely portable; they can be loaded by most music and sequencing packages on a variety of platforms. There are large quantities of MIDI files available over the Internet. MIDI files always contain information about:

- notes, their absolute pitch and length

- MIDI channels and voice changes

They may or may not contain information about:

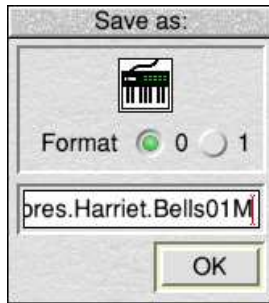
- text and lyrics
- clefs, key signatures and time signatures

They never contain information about

- accidentals (sharps and flats)
- stem directions
- accents
- hairpins, slurs and phrase marks
- decorations (acciaccaturas, etc., accented notes, and trills; trills are expanded during saving and will reload as long sequences of very short notes)
- note styles
- repeat signs (like trills, repeats will be 'played out' when the score is saved)
- the layout of a score

Saving your score as a MIDI file will cause the loss of any information in the score which does not affect how it is played by a MIDI instrument. When you reload the score, Rhapsody will have to re-transcribe it from the MIDI information. This may result in a very different score from the original, although it will still play in a similar fashion.

To save a score as a MIDI file, follow **Score** ♦ **Save MIDI** ♦ from the main menu. A Save box opens:



MIDI files come in two formats: 0 and 1. Format 0 is compatible with all types of MIDI equipment and software but format 1 is preferred because it preserves information about the staves. A piece of piano music written on two staves but played on one channel will reload into Rhapsody on one staff only, when saved in format 0. When saved in format 1 and reloaded, it will appear on two staves.

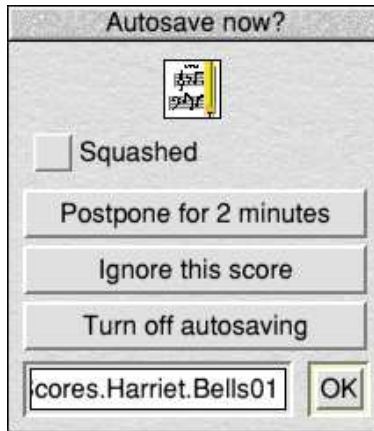
You can now save the file in the same manner as for a Rhapsody 4 file.

PMS files

PMS files are text files which can be loaded into a professional music typesetting program called PMS. This program is also available from Clares Micro Supplies. To save a score as a PMS file, follow Score ► Save PMS ► from the main menu.

Autosave

Autosaving allows you to save a score automatically at regular intervals. This is, useful in helping you keep the score on disc up to date. By default Rhapsody will autosave any modified scores every 5 minutes, using a prompt window.



When this window appears you can:

- 1 Save the score as from a normal Save box, by clicking on OK or dragging the icon. You can also use this method to tell the computer to start autosaving under a new file name, or to start using a squashed format.
- 2 Click on Postpone to delay autosaving for a further 2 minutes. After 2 minutes have elapsed the prompt window will reappear.
- 3 Click on Ignore this score to turn off autosaving for the current score only. Click on Turn off autosaving to turn off autosaving completely.

To alter the time interval between autosaves, or to autosave without opening the prompt window, see the Options tab in the Preferences menu on the iconbar menu. Details can be found on page 138.

You can only autosave files in Rhapsody 4 format.

Removing a score from memory

Closing a score window does not remove the score, or the format in that window, from memory. You can retrieve it by opening a nerry view onto it, as explained above. Closing all the windows relating to a particular score also does not remove it from memory.

To remove a score from memory, follow **Discard score** from the iconbar menu and select the score you want to remove. Scores currently visible in windows are marked with a tick; those which have been modified since they were last saved, with a star. You are warned if the score you select has been modified, and given the opportunity to save it before discarding it.

You can discard all the scores currently held in memory by selecting **Discard score All scores**. If there are any modified scores you are warned that this action will remove them. If you want to save some at this point, you need to **Cancel** the action and save them as normal, before selecting the option again.

An alternative way to discard a score is by following **Score rr - rr) Discard** from the main score menu.

Quitting Rhapsody

To exit Rhapsody, select **Quit** from the iconbar menu. Rhapsody and all the scores and formats held in memory are removed. If there are any scores which have been modified since they were last saved, you are warned that this action will remove them. If you want to save some at this point, you need to **Cancel** the action and save them as normal before exiting.

It is good practice to quit all loaded applications before switching off your computer. You can do this in RISC OS 3 either by quitting all applications individually, choosing **Shutdown** from the Task Manager menu or pressing **Shift Ctrl F12**. Any of these actions will give Rhapsody the opportunity to warn you about unsaved work before exiting.

5. Playing scores

Playing a score

To start playing a score from the beginning, you can:

- press **Ctrl - P** (to start playing from the start of the score)
- select **Play** from on the main menu
- select **Play** from ▶ **Start**

To start playing from the cursor position, you can:

- press **Shift-p**
- select **Play** from ▶ **Cursor**
- press the **Play** icon on the panel



play icon

To start playing from the left hand side of the (linear format) window, regardless of the position of the cursor, you can:

- press **P**
- select **Play** from ▶ **Here**

You can play a score from other positions than these using the **play from ▶** submenu of the main menu:

Play from ▶ Bar ▶ plays the score from a particular bar number. Either type the bar number into the icon provided or use the bump arrows.

Play from ▶ Letter/Figure ▶ plays the score from one of the rehearsal letters (or figures). (Whether letters or figures are used depends on the settings of one of the Print options. See page 133 for more details on this.) Either type the rehearsal letter (or number) into the icon provided or use the

bump affo\rys. Obviously there has to be at least one rehearsal letter in the score before you can usefully use this option.

Whilst a score is playing, clicking on the play icon or pressing P will stop playing the score. Pressing Escape will abort playing and also move the main (linear) view of the score, if there is one, to show the bar in which playing was stopped.

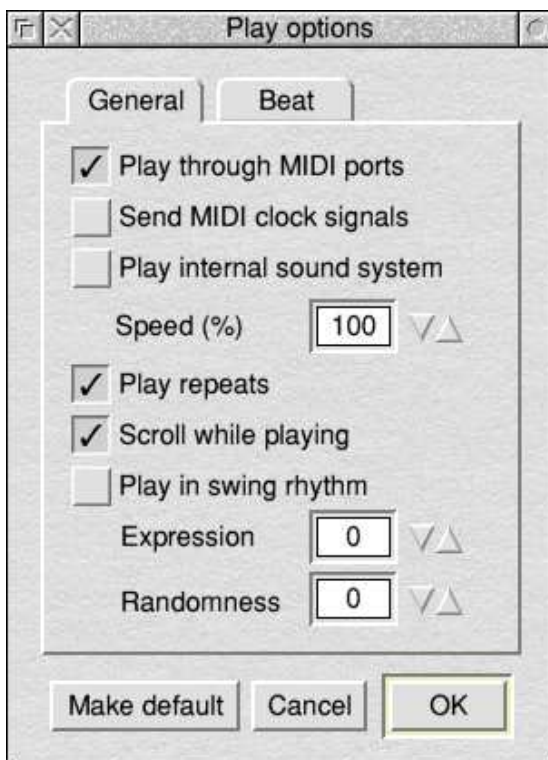
Play options

There are several options available which alter how Rhapsody plays the score. These options do not change the actual score in any way, although they are saved with it so that the score will play the same way when it is reloaded. They are available from a dialogue box reached by choosing the Play options... item on the main score menu.

This dialogue box, like a number of others, has several different pages with tabs at the top like a card index. Click on one of the tabs to access the relevant page.

The first page has some general options while the second has options specifically related to the metronome beat, which you can make sound whilst playing a score.

The first page is illustrated below.



- Playing through MIDI ports

This option is only applicable if you have a MIDI expansion card fitted and the MIDI module is active. When ticked, Rhapsody will send notes others event to any MIDI instruments you have fitted. The instrument, channel and voice number can be selected for each stave; see page 105 for more details.

- Playing through MIDI ports

This option is only applicable if you have a MIDI expansion card fitted and the MIDI module is active. When ticked, Rhapsody will send notes others event to any MIDI instruments you have fitted. The instrument, channel and voice number can be selected for each stave; see page 105 for more details.

- **Send MIDI clock signals**

MIDI clock signals are special MIDI codes which are sent out at regular intervals. They are used to synchronise other MIDI devices with Rhapsody. In principle they could be used to synchronise a slide projector or disco lights etc.

- **Play internal sound system**

All Acorn machines come with an internal sound system which is capable of producing high quality sounds. It is therefore not necessary to have a MIDI instrument to play music with Rhapsody. You will, however, need to load some extra voices if you want to get the best from Rhapsody. Some voices are included on the support disc. The voice used can be selected for each stave; see page 110 for more details.

- **Speed**

This option allows you to change the speed at which Rhapsody plays the score. Either type in a value in the writable icon, or use the bump affows. Values above 100% cause the score to be played faster than it is written; values below 100%, slower.

Note that the tempo changes within the score will still be observed but they are all scaled in accordance with the 'speed' setting. This enables you to skip quickly through a slow piece, or examine closely a fast one; or simply to vary the overall tempo according to your mood.

- **Play Repeats**

With this option selected, Rhapsody will play the score taking account of all repeat, **Da Capo**, and **Dal Segno** indications. If the option is turned off, Rhapsody will play through the whole score once only, skipping out any first time bars.

- **Scroll while playing**

With this option selected, Rhapsody will scroll the linear format window so as to keep the notes being played in the centre of the window. As displaying a score makes heavy demands on processor time, you may find that your computer cannot keep up with both scrolling and playing at the same time. If this is the case, switch this

option off.

- **Play in Swing rhythm**

In **jazz** and **blues** scores, runs of quavers are traditionally played with the first note longer than the second. With this option on, Rhapsody plays quavers as triplet- crotchet, triplet-quaver pairs.

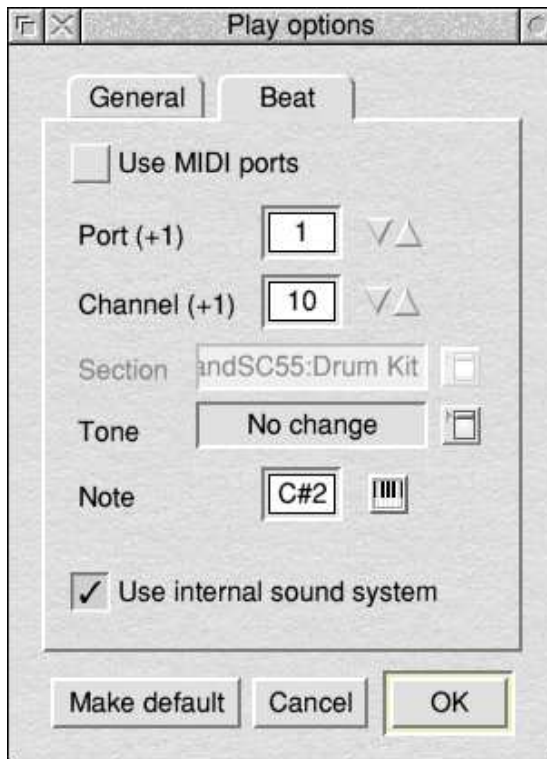
- **Expression**

Computer generated music can sound very mechanical because every crotchet and every quaver is exactly the same length. Some kinds of music can benefit from a slowing down at the beginning of a bar and a speeding up in the middle. This is what the Expression option does. A value of 100% will usually ruin all but the most slushy of pieces. Incidentally, negative values can also be used. This speeds up the start and slows down the middle of each bar. Expression can be altered within a score as well. For more details see page 87.

- **Randomness**

Another way to add the human touch to a piece of music is to add a random element to the exact time every note is played. This is particularly effective in pieces which have large chords as these sound very chunky when played absolutely simultaneously. Again, a value of 100% will test your sanity.

Beat options



When capturing music from a keyboard in real time, it is very helpful to have a beat playing. Rhapsody takes into account the key signature. i.e. in 4/4 time it will play one strong beat and three weaker beats. In compound time e.g. 6/8 it will play one strong beat, two weak beats, one intermediate beat and two more weak beats.

Hint: if you are capturing something in 4/4 time rather slowly, you may want quaver beats rather than crotchet beats. To do this, temporarily change the time signature to 8/8.

- Use MIDI ports

This directs Rhapsody to play the beat through the MIDI interface.

If this option is selected, you can change the port and the channel on

which the metronome beat is output by entering a value into the **Port and Channel** writable icons, or using the bump arrows. (The default is channel 10: the percussion channel, in General MIDI). The tone or instrument sounded is selected by choosing the section and tone from a pair of menus (For more detail on sections and tones, see page 106) You can also change the pitch of the note sounded by entering a value into the **Note** writable icon, or clicking on the small keyboard icon and playing a note on the MIDI instrument. This is of particular importance if you have selected a drumkit tone as different pitches play different drum sounds.

Remember that if you set up the MIDI beat to play on a certain channel with a certain voice, this will override the voice settings of any stave in your score which uses the same channel. Of course, if this is set to the same voice, this will not matter.

- **Use internal sound system**

If the beat is played on the internal speaker Rhapsody will allocate one channel to it'. This will override the score, and consequently some notes may fail to be played. The voice used is 'Percussion-Noise'.

Saving Play options

When you are happy with the play options, click on the **OK** button. If you wish to abandon any changes you have made, click on **cancel**. If you wish to save the options so that every time you open a new blank score, it will have these options, click on **Make default**.

Stopping play

While a score is playing, you can stop it in one of three ways:

- click on the play icon again
- press **P** (This only works if Rhapsody has the input focus)
- press the **Escape** key. This last method has the advantage that the window of the score being played automatically jumps to the place where playing stopped. This is useful because, if you hear a mistake while a score is being played, you can quickly jump to the bar where the mistake is.

Stopping play

5. Playing scores. 49/100

6. Entering and editing

Structure of a score

Before explaining things in more detail it would be convenient to start by explaining some of the terminology to be used.

Every score has a certain number of *staves*. (The maximum number of staves allowed is 50.) Each staff can have its own name, MIDI channel and voice, and various other options. On the printed score, a staff appears as a group of five lines (or just a single line in the case of a percussion staff).

When a score is formatted, the score is broken up into a number of *systems*. Systems are printed music's equivalent of the lines on a page - they are often wider than one staff, and for large works can cover an entire page. Normally, every system contains all the staves, but it is possible to suppress staves which are not needed so that staves which are blank throughout a system may be skipped if space is at a premium.

From a purely musical point of view, the division of a score into systems is irrelevant - which is why it is best to edit music in the linear format mode.

The fundamental division employed by Rhapsody is the *slot*. Each slot has a definite width on the printed score which is the same for all the staves. More importantly, each slot has a definite time associated with it, so that all notes in the same slot are necessarily played simultaneously. (It is this fundamental assumption about musical structure that prevents Rhapsody from dealing sensibly with avant-garde and atemporal music.) The physical width of a slot can be altered by dragging its handle (see page 44) but the time a slot is played depends on what goes on before it, and its length in time is determined by the shortest note or rest which it contains. The next slot follows as soon as that note or rest's time value is over.

Every object must be placed in a slot, even those objects like key signatures, clefs and time signatures which do not in themselves take any musical time. Even barlines occupy a slot.

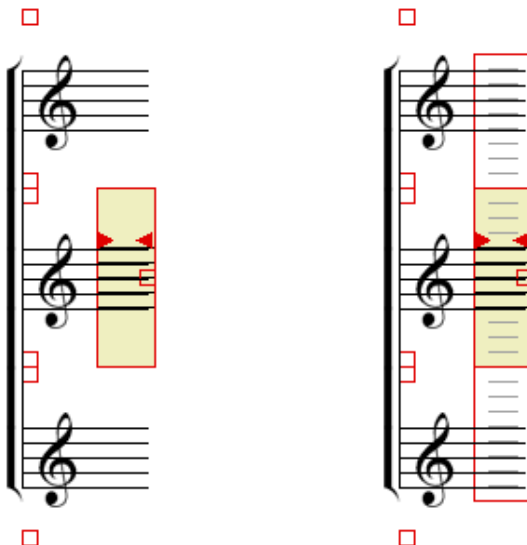
Just as it is possible to write ungrammatical English, it is possible to write ungrammatical music. Rhapsody can detect some of these errors and warn you about them, but it cannot guess what you intended to write any more than a spell checker can, so at the end of the day it is up to you to make sure that what you have written is musically consistent.

If a slot contains notes, there is a further division; the cluster, which corresponds to a note or chord of notes with the same tail. There are normally up to two clusters on each staff, one up-tailed and one down-tailed. Attributes such as note length (including dots, triplets and ties), accents, trills and note styles apply to a whole cluster. In addition to the two standard clusters, it is possible to have two further alternative clusters on each staff. For further details about alternative notes, see page 55.

The cursor

It is important for there to be a position in a particular score marked for editing, rather like the caret in a word-processor. This position, which determines where most editing occurs (as well as other operations like copying or playing) is shown by the cursor. Items are inserted into or around the cursor position, in the score and slot marked, and, when the height of an item up the staff is important, at the height of the red arrows. The cursor can only be in one place at any time, like the caret of a text editing program.

The vertical extent and colour of the cursor can be configured; see page 137 for more details. The cursor is shown in its normal and extended forms below. Note the red arrows on middle C and the little red box on the right hand side.



The action of the mouse buttons and the number of positions available is unchanged by how the cursor is shown. The yellow region shows the extent of the staff on either side of the actual staff lines. The extended region of the cursor shows the range of possible positions for notes and other objects which are attached to that staff.

If you want to position the red affows in one of the extended (white) areas of the cursor, you will find that clicking in this area will not in general work because Rhapsody will assume that you want to move to another staff. To move the red alrows into these extended positions, you must click in the yellow portion and use the cursor movement icons on the main panel, or the cursor keys on the keyboard.

Moving the cursor

To move the cursor once it is in a score, you can:

- click on the slot you want to move the cursor to (note that in drop mode, this will also cause an item to be inserted; see *Drop mode*, below)
- click on the four arrow icons at the top left of the Panel,
- press the arrow keys on the keyboard.

Select-click or arrow keys:

Up	Move the cursor position (red arrows) up one line
Down	Move the cursor position down one line
Left	Move the cursor left one slot
Right	Move the cursor right one slot

Adjust-click or Shift-arrow keys:

Up	Move the cursor up one octave
Down	Move the cursor down one octave
Left	Move the cursor left one slot
Right	Move the cursor right one slot

If the affow keys are used in conjunction with Ctrl there is an additional set of movements that can be performed:

Ctrl-arrow keys:

Up	Move up one stave
Down	Move down one stave
Left	Move to the beginning of the score
Right	Move to the end of the score

To move the cursor large distances you can make use of the Go to option on the main menu. See page 154 for more details.

Resizing a slot

The little red square inside the cursor is a handle which allows you to adjust the width of a slot. Click on the square and hold the mouse button down. When the pointer changes to a left/right arrow, move the mouse to the desired width and release the mouse button. Note that in general, Rhapsody calculates the best slot width every time the slot is edited so you should not need this option very olicrr. When you do use it, however, make sure that it is one of the last things you doo, so that the slot width is not changed by some other action.

It is often desirable to adjust slot widths when triplets occur against duplets in another stave. There is, however, a special option for this. See page 93.

Resizing a stave

At the beginning of a stave there are two more red handles on each stave. These control the height and hence the spacing of the staves and can be dragged in exactly the same way. Each stave can be high enough to accommodate all the extended positions available in Rhapsody. This should be enough for several verses of lyrics as well as very low or high notes. If further space is required for lyrics below a stave, you will need to give the next stave down more space above it, and enter them at the top of this space. In the last resort, you could even insert a blank stave to carry the lyrics (see page 101).

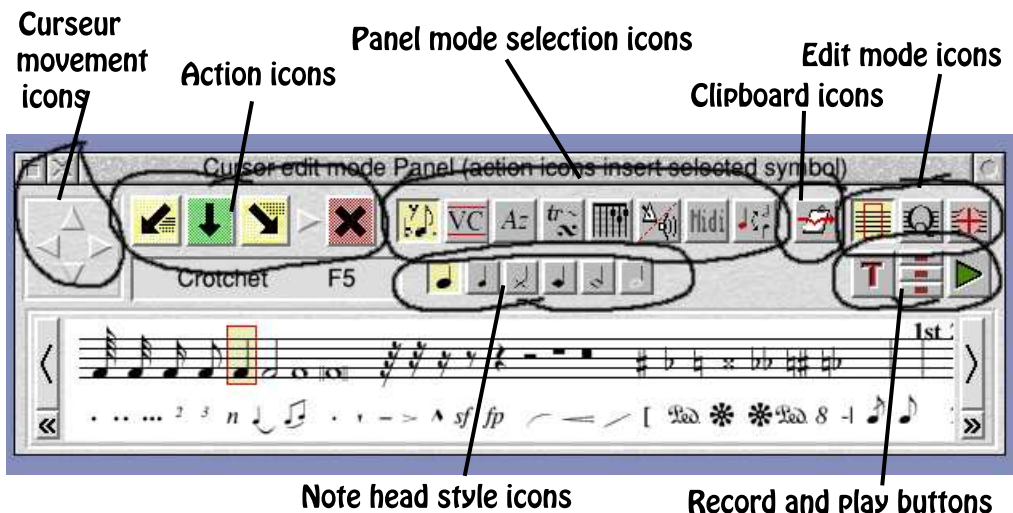
The Panel

Most entering and editing is done through the Panel. This is the window that allows you to select what items to place in the score, and to insert, modify, and delete those items.

To bring up the Panel, you can either:

- click **Menu** over the icon bar icon to bring up the menu, and then select **Show main panel**, or
- place the cursor in a score window and press **TAB** or
- click **Adjust** on the icon bar icon

When it is first opened, the Panel looks like this:



Here we shall look at each group of icons in more detail.

Panel mode selection icons

The row of eight grey icons at the top of the Panel control what kind of object is selected. When you click on one of these icons, the white panel below, changes according to what kind of object you have selected. From left to right, these are:



Symbols - This panel contains nearly 200 different musical symbols



Voice Changes - These allow you to alter the internal voice assigned to the stave or the MIDI channel and/or voice number of a stave at any point along its length. This is useful where the number of channels is limited, or where there is a separate voice for a required effect (e.g. guitar harmonics) For further details see page 81.



Text - This allows you to enter any text or lyrics you require. see page 82.



Trill definitions - Rhapsody has six trill symbols and six different kinds of accents. Each has a default action when played. It is possible, however to change the definitions of all the trills, and the way the accents are played, by inserting a trill

definition at the start (or indeed anywhere) in the score. This panel enables you to set up such a definition. Note that the trills and accents themselves are inserted from the symbols window in the usual way. This panel only changes the way they are played. See page 84 for more detail.



Guitar Chords - This panel enables you to enter guitar chords either from a large selection of predefined chords, or build your own. Note that the chords appear across a whole stave; it is therefore necessary to create a blank stave to hold them. See page 86.



Tempo and Volume Changes - either instantaneous or gradual. Tempo changes are useful for rubato and pauses as well as written speed changes. Volume changes differ from dynamics (eg pp, fff etc.) in that they alter the MIDI volume rather than the key velocity; these can also be instantaneous or gradual, allowing complex crescendos and diminuendos. See page 87.



MIDI events - allows you to insert MIDI sequences such as pitch bend commands and system exclusive messages into your score. See page 89.



Object Adjustments - a range of options allowing you to change the stems, break or reinstate beams, edit note values, apply kerning and other facilities. See page 90.

The different object types are explained in detail in chapters 8 and 9.

The Clipboard icon

Rhapsody maintains a hidden score called the clipboard. Whenever you perform any major operation on a score such as retelling a block or deleting a stave, Rhapsody always saves the unmodified score on the clipboard. When the clipboard has such an unmodified score, a red border appears round the icon. If you decide that you did not want to carry out that particular modification, you can click on the clipboard icon to retrieve the original score. In fact what this does is to swap the score with the cursor in it with the one on the clipboard so if you decide you do want the modified score after all, a second click will swap them back again. In this way

Rhapsody allows you to undo its more drastic operations.

You can save and retrieve scores from the clipboard using a menu option as well.

Edit mode icons

This group of three icons determine which edit mode is selected **Cursor edit mode**, **Quick edit mode** or **Drop edit mode**.



The Panel starts off in **Cursor edit mode**. In this mode, there are three stages to the placing or editing of an object

- First place the cursor at the correct position
- Next select the symbol you want to enter or edit
- Click on one of the action icons described below.



In **Quick edit mode** you do not have to click on the action icons. Symbols are inserted at the cursor position as soon as you click on them. For this reason the selected symbol appears white in the symbols window because the selected symbol is not really relevant. This mode is most useful when you want to add a lot of extra different symbols such as accents or hairpins to an existing score. Click on the score to position the cursor - then click on the symbol you want to insert.



To insert a symbol in a new slot after the cursor slot, hold down Shift whilst clicking on the symbol.



If you hold down the ctrl key when entering a note, the cursor will automatically move to the right position to enter the next note of the melody.

Since you don't need the action icons, these are greyed out except for the delete icon which works in the usual way. Most of the mode selection icons are greyed out for the same reason.



In **Drop edit mode** you do not have to position the cursor. This time you select the appropriate symbol and then click on the score at the position required. The cursor appears white because its

position is not really relevant.



If you hold, the **Shift** key down when clicking on the score, the object will be inserted *after* the selected position rather than *at* it.



Hold down the **Ctrl** key to move to the next position automatically. Again the action icons are greyed out except for the delete icon. Be careful not to click on the score to reposition the cursor as this will insert a new object! Use the cursor movement icons or the cursor keys instead.



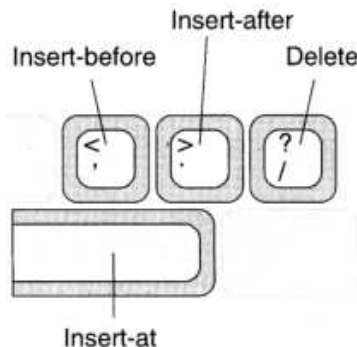
For both Quick edit and Drop edit you can use the keyboard shortcuts to select the note and object type for speedy entry.

The actions icons



These are used to insert items from the panel onto the score, or delete them from the score. If a note is to be inserted, the mouse buttons are used to determine the tail direction; **Select** inserts an up-tailed note, **Adjust** a down-tailed note. Some other items also vary according to which of the mouse buttons are used to insert them. These are detailed in chapters 8 & 9.

Each of these icons has a keyboard shortcut which form a similarly arranged group, at the bottom of the keyboard



Whenever the keyboard short cuts are used, pressing the **Shift** key

down has exactly the same effect as using the **Adjust** button on the mouse. In addition the **Caps Lock** key can be used just as in a word processor: when the Caps Lock light on the keyboard is on, Rhapsody will reverse its normal operations, inserting down tails by default and up tails if you press the **Shift** key. This makes it easy to enter a whole string of down tail notes using the keyboard.



The Insert Before icon (Keyboard shortcut ' , ')

Clicking on this icon (or pressing ' , ') causes a new slot to the left of the cursor. The cursor is moved into the new slot, and currently selected item is inserted at the cursor position.

Not all items can exist on their own in a slot; notably, dynamics, accent and trills, tempo changes, volume changes, and voice changes. These symbols cannot be inserted using the Insert-before icon, although you may be able to **Insert** a note with the object, then **Delete** the note, leaving the object in its own slot. This is not recommended; you should find an existing slot to place the object in.



The Insert-at icon (Keyboard shortcut Space)

Clicking on this icon (or pressing Space) causes the currently-selected item to be inserted at the cursor position.

Some combinations of items cannot exist together in the same slot. If you attempt to create one of these combinations, Rhapsody will not let you insert the second item. You should use Insert-before or Insert-after to create a new slot for the second item. The forbidden combinations are generally self-explanatory:

clefs and: key signatures, time signatures, notes, rests, barlines

key signatures and: time signatures, notes, rests, barlines

time signatures and: notes, rests, barlines

notes and: barlines

rests and barlines

Other combinations, consisting of items of the same type (such as crotchets and quavers with the same stem, or two different kinds of accent), also cannot exist. If you attempt to insert these, Rhapsody will replace the original item with the new one.

Automatic cursor movement



When adding a second or subsequent part to an already existing score, it is necessary to use the **Insert-at** icon and then to move the cursor in readiness for the next note. Rhapsody can do all of this for you. Just hold down the **Ctrl** key while clicking on the **Insert-at** icon. If you are using the **Space** bar to insert notes, **Ctrl -Space** will do the same.



The **Insert After** icon (Keyboard shortcut ' . ')

Clicking on this icon (or pressing ' . ') causes a new slot to be created to the right of the cursor. The cursor is moved into the new slot, and the currently-selected item is inserted at the cursor position

Not all items can be inserted into a new slot on their own, notably, dynamics, accents and trills, tempo changes, volume changes, and voice changes. These symbols cannot be inserted using the **Insert-after** icon, although you may be able to insert a note with the object, then delete the note, leaving the object in its own slot. This is not recommended; you should find an existing slot to place the object in.



The **delete** icon (Keyboard shortcut ' / ')

Clicking on this icon (or pressing ' / ') will delete an item from the cursor slot. Which item is deleted depends on the items at the cursor position, and the item selected in the panel.

If there is one item of the same kind as the one selected (note, rest, trill, etc.) at the cursor position, that item is deleted.

If there are two items of that kind (eg two notes with different tails, etc.,) at the exact cursor position, which item is deleted depends on which mouse button is used. **Select** will delete the up tail note, **Adjust** will delete the down tail note. (As always, when using the keyboard, pressing the **Shift** key or switching to **Caps-lock** mode has the same effect as using the **Adjust** button.)

If there is no item of that kind at the cursor position, Rhapsody deletes the nearest item of that kind to the cursor position in the cursor slot.

If there is no item of that kind in the cursor slot at all, Rhapsody will not be able to delete anything as long as items of other kinds remain. If you delete the last object in the whole slot, the slot will be left in the score but it will be completely blank. This is so that you can easily replace the deleted object with a new one. If on the other hand you want to delete the slot completely, click on the **Delete** icon again

To delete a whole slot including everything in it, press **Ctrl-Shift-Delete**

The Insert new slot icon

This icon (which looks like a cursor movement icon) is sandwiched between the Insert-after and the Delete icon. It acts like the Insert-after icon but it doesn't insert anything. Alternatively you can think of it as moving the cursor to the right, opening up the score at the same time.

Dragging Symbols

Most of Rhapsody's musical symbols can be dragged anywhere around a score and even from one score to another. The general method is as follows.

- Place the pointer over the symbol you want to move. Press **Select** (to move the symbol) or **Adjust** (to copy it and insert the copy)

somewhere else). Hold the button down until the pointer changes. The pointer shape will indicate the kind of symbol you have picked up. eg a note head for a note, a sharp sign for an accidental, 'C' for a clef and 'Ks' for a key signature etc.

- Move the pointer to the place you want the new symbol and release the mouse button.

Most symbols will be automatically positioned by Rhapsody and will therefore jump into line when you release the mouse button. Other symbols (notably hairpins and phrase marks) you are allowed to position anywhere you like.

Micro adjusting

Micro adjusting note clusters, accidentals and accents

It occasionally happens that with complex clusters including accidentals (particularly if you are using *alternative notes* as well - see page 55) Rhapsody is unable to determine the clearest possible way of printing the clusters. To solve this problem you can adjust the position of any cluster or accidental sideways within a slot by holding down the Ctrl key while you drag the object.

For example, this is how Rhapsody prints a certain bar



You can see how the F# in the alto part is obscuring the G in the soprano part. By moving the G to the right and the F# to the left you can obtain the following much clearer result.



In the next example, alternative notes (see page 55) have been used to write three parts on a single staff.



In order to separate the overlapping notes, move them sideways as shown below:



In order to micro adjust an alternative note, you must hold Alt down as well as Ctrl.

Here is another bar:



The problem in this example is all those troublesome accidentals. By micro adjusting the positions of the accidentals, you can easily produce the following:



In addition to adjusting the positions of clusters and accidentals sideways,

you can also move accents and trills further away from the note. Again this is done by holding down the **Ctrl** key while you drag the accent. The following (unlikely) score was entered by micro-adjusting the positions of the trills and adding the accidentals as text objects (using the small PMS alpha font).



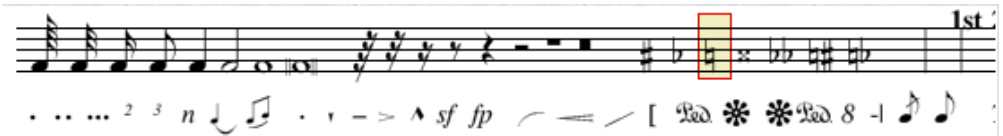
💡 If there are two notes on the same line, one with an up tail and the other with a down tail, using the **Select** button when micro-adjusting will move the up tail note; using the **Adjust** button will move the down tail note. Note that whenever you edit anything in a slot Rhapsody will 'tidy up' the whole slot, and sometimes the slots on each side as well. This will destroy any micro-adjusting that you have carried out. *Only do the necessary micro-adjusting when you are sure that all other editing is complete.*

7. Musical symbols

This chapter contains detailed descriptions of all the musical symbols available in Rhapsody. These symbols are reached by selecting the first of the eight panel mode selection icons (the symbols group). For more information on the Panel see chapter 6, *Entering and editing*.



When the Symbol group icon is selected (including during quick edit mode) the symbols window contains a selection of nearly 200 different musical symbols



Since it is not possible to display all the symbols at once, you can move the symbols window left and right. There are four ways of doing this; you can:

- click on the symbols window and drag the mouse pointer to the left or the right
- click on the two large arrow icons to left and right with either **Select** or **Adjust** and hold the mouse button down. The view moves slowly at first, then accelerates. Using the **Adjust** button reverses the direction of motion.
- click on the two smaller double arrow icons to left and right with either **Select** or **Adjust**; these move the display one screen full at a time. As before, using the **Adjust** button reverses the direction of motion.
- press **Ctrl-Page Up** or **Ctrl-Page Down**.

All the symbols are selected by clicking on them. The name of the symbol is shown in the box above the symbols window.

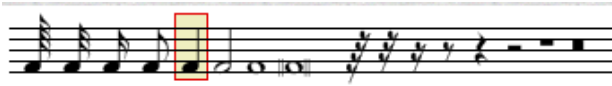
💡 Another way to select a symbol quickly is to click on a similar symbol already present in the score using the **Adjust** button. The symbol is selected and the symbols window scrolls to show the selection.

Most symbols can then be inserted immediately, using whichever mode of editing is being used. (If you are using Quick edit mode, the symbol is inserted as soon as you click on it for the first time; this means you have to be careful

when moving the symbols window.)

💡 If the symbols scroll slowly then it is likely that your font cache is set too low. try increasing it via the Task Manager window, or pennanently using Configure.

Notes and rests



Rhapsody allows you to enter notes and rests of lengths between hcrnltcrri semiquavers (1/16 crotchet) and breves (8 crotchets). Select the ono you wrrrrl. position the cursor and click on Insert-at.

Notes can be in one of six styles as indicated by the note style icons illustrated below.



The styles are:

- normal
- small sometimes used for alternative or optional notes
- crosshead often used for unpitched notes eg a shout
- diamond give an old style look to a score
- open diamond used for harmonics
- headless sometimes used where only the rhythm is important

All these styles are applied to individual noteheads. It is perfectly possible. therefore to have a chord (or cluster) containing two or more noteheads, each whith a different style. This is required for the correct writing of artificial harmonics, for example.

(In addition to the *note* styles, there are two part styles which may usefully be mentioned here. These are:

- used to indicate other parts being played
- used to indicate other parts being played

It is not possible to select these options when entering notes: so enter them as normal notes, then used the Block ▀ Part style ▀ menu to set the part style (see page 120).

Invisible notes can be produced by using the stemless part style together with the headless note style. Since the beams or short notes will be visible this can be used to achieve some effects found in some modern music)

Each staff can have up to two parts (e.g. soprano and alto) on it, an up-tailed part and a down-tailed part; each of these can contain a note, chord or rest (Click on **Select** when inserting to add an up tail note; **Adjust** to add a down tail note. Alternatively, if you wish to use the keyboard to edit, holding down the **Shift** key (or switching to Caps Lock mode) has the same effect as using the Adjust button. When deleting, the note nearest the cursor is used regardless of the status of the mouse buttons except when there are two notes on the same line of the staff. Then the mouse buttons determine which is to be deleted.

It is easy to become confused about scores containing two parts on the same staff. It may be useful to note these points:

- Semibreves and breves are notes with 'tails' just like the other notes, so it is important to get them the right way up wherever they occur. Accents always place themselves on the opposite side of a note to the tail, so you can find out the direction of a note like this by giving it an accent temporarily.
- It is normal for the stems of the upper (eg Soprano) part to point up and the lower (Alto; part to point down but when the Alto part goes higher than the Soprano, the tails will cross. This is standard practice, e.g.:



- Rhapsody will handle two part music with rests just as easily. For example:



When inserting rests, if you use the **Select** button, Rhapsody will put the rest in its default position. If, however, you use the **Adjust** button (or if you hold the **Shift** key down while using the keyboard) the rest will be inserted at the height of the red cursor arrows. Remember that you can drag rests up and down a staff too, just like notes and other symbols.

Alternative notes

The two-part structure means that Rhapsody does not expect notes of more than two different lengths to share the same slot. Normally this is not a problem, but it can be worked around by transfeoirg some notes to another staff. Given that three parts per staff can become confusing, it may be a good idea to consider adding a new staff in any case. (Rhapsody has no problems bracing three or more staves together, in the case of keyboard music.)

That said, there is a way to enter more than two parts into the same slot done by holding down the **Alt** key while inserting a note with **Select**. Notes entered in this way are called 'alternative' notes and are displayed in a different colour to distinguish them from ordinary notes. Alternative notes are iust like ordinary notes but they are completely independent, giving you access to up to four parts per staff (two up, and two down). In order to drag, edit, or modify them in any way, the **Alt** key must be held

down. For example, to add an accidental to an alternative note, select the appropriate symbol, place the cursor over the note. press and hold the Alt key and click on Insert-at. Note that while the Alt key is pressed, Rhapsody will look for the nearest *alternative* note, not necessarily the nearest note to the red cursor arrows. (Note also that the keyboard shortcuts cannot be used when inserting alternative notes because holding down the Alt key temporarily changes the way RISC OS interprets the keyboard.)

Although they are played as normal, Rhapsody ignores alternative notes when calculating the time position of notes within the bar so it is possible to put too many alternative notes in a bar without Rhapsody complaining. This can lead to unpredictable results when the score is played.

Block operations (for example, changing the note style or adding accents) can also be carried out on alternative notes by having the Alt key held down when the relevant menu option is selected. Clear operations, however, act on both normal and alternative notes simultaneously.

Since alternative notes or clusters may overlap the ordinary notes with the same stems, it is often necessary to displace them (or the notes they obscure) a little way sideways. This is called **Micro adjusting**, and is carried out using the Ctrl key. In other words, to displace an alternative note cluster sideways, you must press Alt-Ctrl while dragging the note. See page 51 for more information on Micro adjusting notes.

Alternative notes are useful in three situations:

- when a single stave has to handle more than two independent parts
- when a chord contains more than two notes of different lengths
- when a single part has an ossia or alternative version.

Example: Handling more than two independent parts (p57)



Here the first Alto line moves independently of the other parts and has been inserted using alternative notes. Normally speaking, it would be better to put the Soprano and Alto parts on separate staves but there are times when a short score is adequate.

Example: Chords containing notes of different lengths



This example could be written in two parts, but if it is for piano or organ, it is normally written using alternative notes as shown. Note that wherever possible, you should make the longer notes alternative notes. This will ensure that Rhapsody plays the bar correctly.

Example: An ossia part

Sometimes an alternative note, or series of notes, is provided for the benefit of players unable or unwilling to produce the note written (this is especially true of very low or very high notes.) The alternative note is given a small note-head as in the following example:



To produce this effect:

- 1 enter the standard notes in the usual way
- 2 select the minim symbol
- 3 click on the 'small notehead' icon (see page 54*).
- 4 insert the note using the **Adjust** button so that the tail points down (the new note will be completely obscured by the original one, but it is there all the same)
- 5 holding down both **Ctrl** and **Alt**, drag the note sideways so that it becomes's visible
- 6 increase the width of the slot using the handle on the cursor
- 7 repeat 2, 4 and 5 as necessary for other ossia notes.

Multiple symbol entry

It is possible to select several other symbols together with a note or rest at the same time, so that strings of notes with accidentals, dots, etc., may be entered easily. To do this, select the note or rest in the normal manner, then click **Adjust** successively on each of the symbols you want to be associated with the new note.

You can do this with most of the symbols commonly associated with notes:

- accidentals (sharp, flat, natural, double sharp, etc.) a dots (including double and triple dots)
- triplets (including duplets and n-plets) a accents (including *sforzando* and *forte-piano*)
- ties and slurs.

All these symbols are by default located on the same section of the symbols window, so as to be easily reachable. Note that it makes no sense for a rest to have an accidental, accent or tie; however, the dot and triplet options are still available.

The **Adjust**-selection feature makes it possible to enter a tied, staccato triplet dotted quaver with a double flat with one click of the **Insert** button - after you have set up the selection, naturally.

Accidentals

These can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the accidental on the nearest note. Accidentals can be selected at the same time as notes using **Adjust**; see above for more information.

Bracketed accidentals

Sometimes it is useful to put an accidental into a part which is not strictly necessary. Such an accidental is placed in brackets, as shown in the example below.



To enter a bracketed accidental, select the accidental you need and use the **Adjust** button to insert it (or the **Shift** key, if you are entering notes with the keyboard).

Barlines

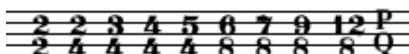
There are two kinds of 'bar' lines, which we shall call *proper barlines* and *supplementary barlines*. Proper barlines always denote the end of one bar and the beginning of the next, and are numbered as such. Supplementary barlines may occur in the middle of a bar as well as between them, and it is necessary to insert both a proper and a supplementary barline into a slot if you need a repeat, double barline, etc., at the end of a bar. Often Rhapsody will have inserted the proper barline for you, and you need only insert the supplementary one afterwards. If a supplementary barline exists in a slot, the proper barline is not printed, although it makes a difference to the bar

count.

The proper barlines available in Rhapsody 4 are:

- the standard barline
- the *first time* bar; all bars from this bar until the next repeat sign are played only when the repeated section is being played for the first time. If this section is very long and ends at (or soon after) the repeat bar, you may want to consider using a *DS* or *DS al fine* instead. Scores vary on whether the bar numbering includes first time bars or not; see chapter 5 for more details.
- the *second time bar* ; it is normal to place this at the repeat sign to complement the first time bar, although it does not actually affect how it is played. It draws attention to the fact that the second-time section has replaced the first-time section when played the second time around. If the repeat sign was in the middle of a bar, it may not be possible to use the second time bar sign.
- the rehearsal mark; this is like the standard barline, but a letter or number appears above the score at that point. Rehearsal marks draw attention to points of change in the score, the start points of new sections and the like, that would be useful starting points in a rehearsal. To change whether rehearsal marks are printed as letters or as numbers see page 133.

Time signatures



Nine commonly-used time signatures are available directly from the symbols window. The final symbol (the PQ-time-signature symbol) allows you to enter any time signature.

When the PQ-time-signature symbol is selected, writable icons appear above the symbols window to allow you to enter any time signature. The upper number is the one that appears before the slash. Time signatures between 1/1 and 32/32 may be entered.

💡 Unlike clefs and key signatures, time signatures **cannot** be placed in the middle of a bar. When they occur in the middle of a score they should be placed immediately after a barline.

8. Additional symbols

Dots, triplets, ties and slurs

The first group on the bottom row of the symbols window contains dots, triplets and the like, the tie and the slur symbol.

Dots are inserted onto a note or rest to augment its length:

- the single dot . lengthens a note by $1/2$ its original length
- the double dot .. lengthens a note by $1/2 + 1/4 = 3/4$ its original length
- the triple dot... lengthens a note by $1/2 + 1/4 + 1/8 = 7/8$ its original length.

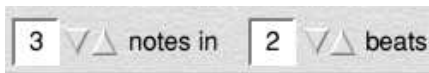
Dots can be inserted wherever there is a note or rest. If the cursor position is not exactly on a note, Rhapsody will place the dot on the nearest note. If a dot is placed on one note of a chord, Rhapsody will automatically dot the other notes in that chord. If you want one note to remain undotted, you will have to use a cluster with the opposite tail or use an alternative note cluster (see page 55). If a slot contains one note and a rest, using **Select** will dot (or undot) the note, **Adjust** will dot (or undot) the rest.

Dots can be selected at the same time as notes using **Adjust**; see the previous chapter, for more information.

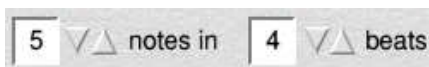
(Dots should not be confused with the staccato 'dot' later in the window (placed with the accents), which can also be attached to any note.)

A triplet note (shown as a 3 in the symbols window) is $2/3$ the length of its base (non-triplet) note, so that three of these fit into the same time space occupied by two normal notes. Duplets (shown as 2) are the opposite of this and occur in compound time; they are longer than their base note, so that two duplets fit into the space of three normal notes. Note that a duplet quaver, for example, is the same length as a dotted quaver; the difference is one of notation.

Sometimes sets of notes are encountered with more complicated lengths than standard duplets or triplets. These notes can be created using the n-plet (tuplet) symbol (n). When this symbol is selected, writable icons appear to allow you to enter the nature of the n-plets. A standard triplet plays 3 notes in the space normally occupied by 2 of that kind of note, and is therefore entered like this:



Quintuplets normally consist of 5 in the space of 4 (although in compound time, they can be 5 in the space of 6; this would correspond to a different setting of these icons)



All these symbols can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the symbol on the nearest note. If a triplet is placed on one note of a chord, Rhapsody will automatically change the other notes in that chord. If you want one note to remain un-tripletted, you will need to give it the opposite tail to the triplet notes or use an alternative note cluster.

Triplets can be selected at the same time as notes using **Adjust**.

Triplets can be added and removed from rests in the same way as dots.

A tie between two notes instructs the player to play the notes as if they were a single note with the combined length of the two notes. By convention a note is split into two or more tied notes if it needs to be played across a barline or strong beat in a bar. Rhapsody does not assume you will use this convention (except when transcribing music played on a MIDI keyboard), but it can make scores clearer to read, and it is the only way to enter notes of some lengths, especially in unusual time signatures.

A tie can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the symbol on the nearest note. If a tie is placed on one note of a chord, Rhapsody will automatically tie the other notes in that chord. If you want one note to remain untied, you will need to give it the opposite tail to the tied notes or use an 'alternative' cluster.

The tie stretches from the cursor position as far as the next note with the same tail or the next note on the same line, whichever comes first. This rule copes with the majority of situations but there are times when the tie stretches to the note beyond as in the example below. In cases like this, use 'alternative notes'.



Ties can be selected at the same time as notes using **Adjust**.

Normally, ties bend away from the tail, but in two part music they bend towards the tail. This convention does not always apply, however, particularly with chords where the top note can bend in the opposite direction to the others. If you do not like the default direction chosen by Rhapsody you can change it. See the description of the Reverse tie icon on page 92 for more details.

A slur across two or more notes is an indication to the performer to play the notes smoothly. This is indicated in the score like this:



Only the notes indicated with a * have been given a slur. Notice that the last note of each group does not have a slur, because it is not slurred to the following note.

Slurs can also be entered using **Block ▶ Part style ▶ Slurred**. See page 121

There are occasions when Rhapsody may not position the slur in quite the best place. If appearance is important, use a phrase mark instead. (See page 66).

When slurred notes are played, they are lengthened slightly so that the notes overlap. Normally this makes no difference at all to the sound of the notes but many MIDI instruments have a feature called 'Fingered Portamento'. If the voice you are using has this feature switched on then the next note will join on smoothly to the previous one without restarting a new note. This feature is really only of use with instruments which can sustain a note, like strings and wind instruments.

Accents

· ˇ - > ^ *sf* *fp*

Rhapsody supports seven types of accent, six of which are definable, that is, they can have their own length (in terms of the length of the original note) and dynamic. By default the accent symbols alter notes in this way:

Staccato	50% length	No change to dynamic
Spiccato	30% length	No change to dynamic
Tenuto	80% length	Played 10% louder
Accent	Full length	Played 30% louder
Stressed	Full length	Played 10% louder
Sforzando	Full length	Played 40% louder
Forte-piano	(played as normal)	

To define how an accent is played, place atrill/accnt definition object in the score before the accent. This definition will apply to all trills and accents until the ncxt trill definition is encountered. See *Trill definitions* on page 84

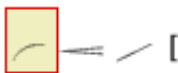
Accents can be placed on any note but they alter the length and loudness of the whole note cluster (i.e. note or chord) that they refer to. If you want one note in a chord to remain unaccented, you will need to give it the opposite tail to the other notes, or use 'alternative notes'.

If the cursor position is not exactly on a note when the accent is inserted, Rhapsody will place the symbol on the nearest note.

Accents can be selected at the same time as notes using Adjust.

A whole block of notes may be accented, or silenced completely, using Block ▶ Accents ▶ (see page 120).

Phrase mark, Hairpins, Lines and Brackets



Phrase marks are used to group together notes into musical phrases. They are for the player's guidance only and have no effect on how the score is played by Rhapsody. They are however an important aspect of a well

printed score and should not be omitted.

Any number of phrase marks can be placed in any slot, at different heights. To insert a phrase mark, select the phrase mark symbol (the one shown selected in the illustration above), place the cursor in the score at the appropriate position with the red arrows at the right height and click on the Insert-at icon with either **Select** or **Adjust**. **Select** inserts a phrase mark which bends upwards while **Adjust** inserts a downward bending mark. There is, however, no lasting distinction between the two and both can be altered in any way you like. This is done by dragging the beginning, end and control points about the score. The control points work exactly like those in !Draw. A little bit of experimenting will show what they do.

To drag either of the end points, click **Select** over the solid blue point and hold the mouse button down until the pointer change shape; then drag the point to the place you want it to go to and release the button.

💡 The control points (blue outline circle) are dragged in exactly the same way except that if the control point is a long way from its parent'end'point, sometimes Rhapsody is unable to find it. Indeed, if you drag a phrase mark close to the edge of a score the control points can sometimes end up outside the limits of the score. if this happens, you can always find the control point by holding the **Shift** key clown and dragging the beginning or end point. The pointer will immediately jump to the control point even if it is off the score.

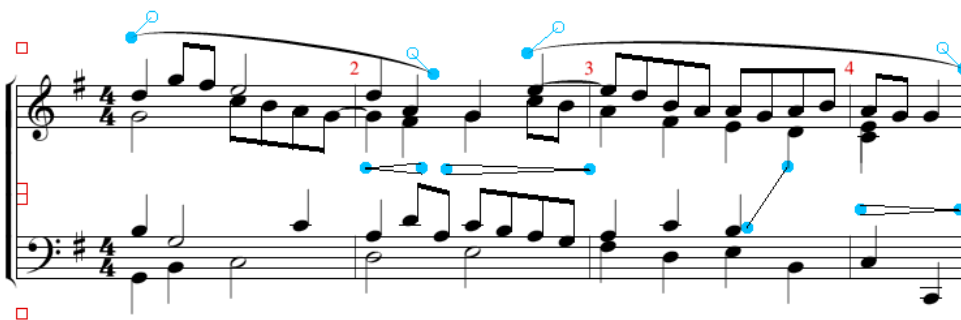
To delete a phrase mark, place the cursor on the beginning point and then delete it using whichever action is appropriate for the current editing mode. If there is more than one phrase mark in the slot, Rhapsody will delete the nearest.

Hairpins are used to represent gradual changes in dynamic. The open end represents the louder sound. However, Rhapsody does not take account of hairpins when playing a score, as the hairpin itself does not indicate how much of a crescendo or diminuendo is required. To enter a gradual change in dynamic, you can either use a series of hidden dynamic markings (see

Dynamics, page 71); or you can use a gradual change in volume (see Tempo changes and volume changes, page 87). The former method is preferred in piano music because the dynamic symbols alter the strength with which the note is struck. In organ or string music, however the latter method is better because the crescendo will continue throughout the length of the sustained note.

Hairpins are entered, edited and deleted in exactly the same way as phrase marks. Using **Select** inserts a crescendo hairpin, **Adjust** a diminuendo hairpin. Hairpins do not, of course, have any control points.

The third member of this group enables you to insert a simple line into a score. Use of the **Select** button will produce a solid line; **Adjust** will produce a dotted line. The main use for this feature is to indicate where a part (usually in a piano score) changes from one stave to another. Here is a fragment from a score which uses phrase marks, hairpins and a line:



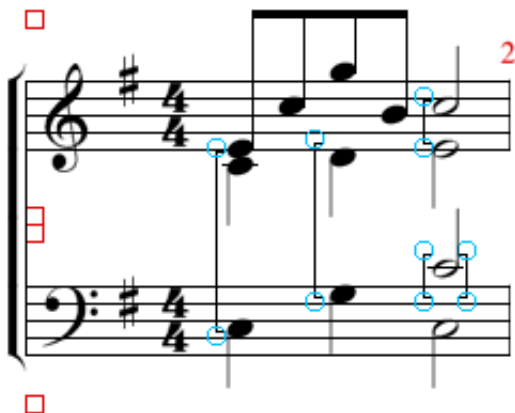
The Square bracket is used for a number of purposes. It can be used to bracket optional notes or passages and sometimes the left hand bracket is used to bracket notes in adjacent staves which are connected in some way eg by being played with the same hand. eg:

The left hand bracket is inserted using the **Select** button and the right hand bracket with the **Adjust** button.

When you have inserted the default bracket, you can drag the blue control spots anywhere you like. When you drag one end, the other end remains vertically aligned with it.

💡 If you want to make a bracket extend outside the limits of the stave that it is on. note that that once you have released the control spot somewhere off the stave, you will not be able to find it again, because the cursor will move to the new stave, which is not where the bracket was added. It is a good idea therefore to move this end first so that you can still adjust the bracket with the other end. If you lose both ends of the bracket, the only thing to do is delete it and start again.

Pedal marks and Octavo marks



Pedal marks refer to the use of the sustain pedal in keyboard music; when the pedal is depressed, all notes are sustained as if tied indefinitely, and when it is lifted, those notes are damped as normal. Some composers also place 'hanging ties from notes, sometimes accompanied by the directions *let ring* or *laissez vibrer* to denote the use of the sustain pedal.

Rhapsody uses three distinct markings:

- the start pedal mark, Ped. or $\text{Ped. } \underline{\hspace{1cm}}$
- the end pedal mark, \ast or $\underline{\hspace{1cm}}|$
- the new pedal mark, where the pedal is lifted to damp all sustained notes and immediately pressed again; $\ast \text{ Ped.}$ or $\underline{\hspace{1cm}}\wedge\underline{\hspace{1cm}}$

Each staff can have one pedal marking in each slot, although MIDI only allows one sustain pedal per channel (sensibly enough); if Rhapsody comes across staves on the same channel with conflicting pedal markings, it may become confused and play the score incorrectly.

Inserting a pedal marking with **Select** causes it to appear in the default position for these markings, using **Adjust** allows you to specify the height up the staff at which the pedal marking is printed, which is useful if very

high or very low notes are required to fit between the marking and the stave. You can drag the pedal marks up and down after they have been inserted, or shift pedal marks within a block selection (see page 118).

💡 Inserting a pedal mark with the CTRL key pressed inserts a global pedal mark - ie one that applies to all the staves.

Octavo marks denote that the passage inside the marks is to be played either one octave above or one octave below the way it is written. This is often used in passages which would otherwise have unsightly quantities of ledger lines. The beginning and end of an octavo section are inserted separately.

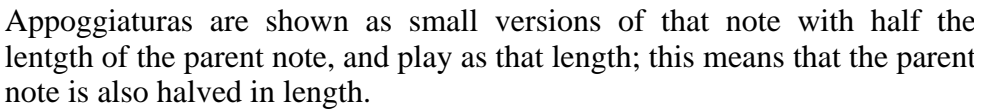
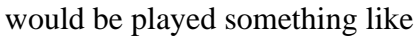
If the cursor position is below the central line of the stave when the octavo marking is inserted, an 'octave down' octavo marking is inserted; otherwise, an 'octave up' marking is inserted.

Inserting an octavo marking with **Select** causes it to appear in the default position for these markings; using **Adjust** allows you to specify the height up the stave at which the octavo marking is printed, which is useful if very high or very low notes are required to fit between the marking and the stave. You can drag octavo marks up and down after they have been inserted, or shift octavo marks within a block selection (see page 118).

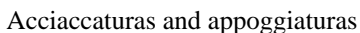
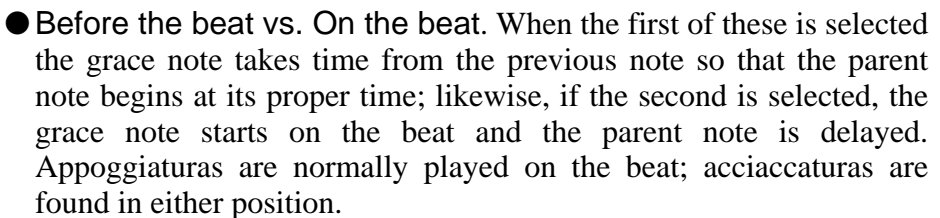
Acciaccaturas and appoggiaturas



Also known as crushed notes and grace notes, these symbols instruct the player to insert a short note which does not count towards the timing of the whole bar. Acciaccaturas (pronounced a-chack-a-tura, not a-catchy-a-tura) are distinguished by a line through their stalks and are played as quickly as possible. So, for example



Grace notes can be played either on the beat or before the beat. In order to set this option a pair of additional icons appears in the panel when you select either of the grace notes symbol.



- **Run vs. Chord.** If there is more than one grace note attached to the parent note. Rhapsody can interpret them in one of two ways; either they can be played consecutively (Run), or all at once (Chord). These options allow you to select between the two. Note that when Run is selected, notes are played (and displayed) in the order in which they were inserted.

Grace notes can be inserted and deleted just like any other note; if there is already more than one note present in the slot, the parent note is taken to be the nearest note. (If you need to add a grace note to the further of two notes, you will have to delete the nearer note, add the grace note then reinsert the first note.) You cannot add a grace note if there is no parent note for it to be attached to. (Be careful not to add more grace notes to a grace note chord than you intend to. Because the notes will be printed on top of one another, the additional notes will effectively be invisible.)

Dynamics

Tc ppp ppp' pp pp' p p' mp mp' mf mf' f f' ff ff' fff

There are sixteen dynamic levels, including silence (*Tc* or tacet). A dynamic level with a clush represents a volume slightly louder than the undashed level. Dynamics alter the key velocity when played over MIDI - thus, louder notes may acquire a harsher tone, as you would expect from a real instrument. MIDI makes a clear distinction between key velocity and volume; to play a note at a particular volume without changing the quality of the sound, use the Volume change group icon (see page 87). By varying the relative volume and dynamic, you can achieve some interesting effects.

You may not want all dynamics to be printed. For example, you can simulate a crescendo or decrescendo using dynamics, which will have the advantage (over a gradual volume change) of using the key velocity to create a more realistic effect. However, the series of dynamic changes should only affect how it is played. To 'hide' a dynamic from being printed, click on the 'Don't print' option which appears when the dynamic is selected.

Inserting a dynamic marking with **Select** causes it to appear in the default position for these markings; using **Adjust** allows you to specify the height up the staff at which the dynamic is printed, which is useful if the normal position is obstructed.

Note that because of the response of the human ear, a change in dynamic near the loud end of the scale may appear to have less effect than the same change near the soft end. The range MIDI uses for dynamics is between 0 and 127; you can counteract this effect to some extent by changing how the 16 dynamic markings used in Rhapsody relate to the MIDI values. To do this, use the dynamics map available by selecting Preferences... on the iconbar menu and clicking on the Dynamics tab. For more information see page 140.

Common directions

A selection of common directions are provided in the font styles normally used for them:

cresc. *decresc.* *dim.* **accel.** **rit.** **rall.** pizz. arco

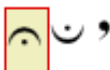
<i>cresc.</i>	Crescendo - getting louder
<i>decresc.</i>	Decrescendo - getting softer
<i>dim.</i>	Diminuendo - 'diminishing', i.e. getting softer
<i>accel.</i>	Accelerando - getting faster
<i>rit.</i>	Ritenuto - held back
<i>rall.</i>	Rallentando - getting slower
<i>pizz.</i>	Pizzicato - plucked
<i>arco.</i>	Arco - bowed

Inserting one of these directions with **Select** causes it to appear in the

default position for these markings; using **Adjust** allows you to specify the height up the stave at which the marking is printed, which is useful if the normal position is obstructed.

These directions are *not* the same as ordinary text, even though at present they do not affect the way the score is played. Future versions of Rhapsody 4 may use these directions to help it play more realistically; whereas text will always be ignored by the play routine. You are advised to use these directions when you can, so you can take full advantage of these features when they are implemented.

Pauses and breath marks



Pauses tell the player to play the note, rest, or space between bars indicated by the pause mark, for longer than normal; breath marks suggest places for vocal or wind parts to breathe, or have a similar but less marked effect to pauses. (See also the caesura, under *Barlines* on page 59).

Inserting a pause or breath mark with **Select** causes it to appear in the default position for these markings; using **Adjust** allows you to specify the height up the stave at which the marking is printed, which is useful if the normal position is obstructed. You can only have one pause or breath mark per slot on each stave, regardless of whether there are two or more parts; because they refer to changes in tempo, all parts should pause at the same time. An exception to this occurs when one part carries on for a note or two longer as in the example below.

This example also illustrates the use of the inverted pause beneath the piano stave.

It is impossible for Rhapsody to know exactly how to interpret pauses and breath marks but as a first approximation, slots which contain a pause are doubled in length and a breath mark is played by cutting short all the notes in the slot without change of tempo. These effects may be modified by the use of the volume and tempo effects described on pages 87 and 88.

Bowing marks and Harmonics



The down bow and up bow markings refer to the direction of movement of the bow of a stringed instrument; generally, down bow notes can be produced with greater attack, up bow notes can be produced with more precision.

Inserting a bow marking with **Select** causes it to appear in the default

position for these markings; using **Adjust** allows you to specify the height up the staff at which the marking is printed, which is useful if the normal position is obstructed.

There does not have to be a note in a slot in order for there to be a bow marking; this is so that long notes can have bow changes marked halfway along. You can only have one bow marking in a slot, so separate parts on the same staff must use the same bowing.

The harmonic marking \circ denotes that the note should be played in a way which gives a much purer sound. In string and guitar playing this often involves using non-intuitive fingerings, and there is sometimes a choice, leading to harmonics of subtly different timbre. However, many instruments cannot produce harmonics at all.

Harmonics can be written in two ways. Either the note sounded is written with 1 harmonic marking, and it is left up to the player to decide which method to use to play the harmonic:



or both the note fingered and the note sounded are written out, normally with different note heads:



This example shows how a top E is produced on the A string of a violin by pressing lightly on the lower E.

A harmonic marking can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the symbol on the nearest note. If the cluster containing the symbol consists of more than one note, the harmonic is added to the whole chord. Separate harmonics can, however, be added to notes of different tails in the same slot.

The two previous examples illustrate what are called natural harmonics. This is because they are produced by lightly pressing an otherwise open string. Artificial harmonics are produced in the same way but the string is also stopped. Here is an example of a series of artificial harmonics played on a violin:



The lowest note (with a normal note head) is the one which is actually fingered; the middle note (with the open diamond head) is lightly pressed with another finger while the top note (with a small note head) is the pitch which is actually produced. The top note is often omitted, particularly if it is too high.

Repeat bar sign



The repeat bar sign is frequently used in band music to indicate that a bar is to be repeated several times. Rhapsody will play it as intended.



Glissando

/

This symbol (which is just a line joining one note to another) tells the player to fill the gap between two notes with all the intervening notes played in quick succession. This is accomplished smoothly where possible, for example on stringed instruments, the trombone, some wind instruments, and timpani; otherwise, all the notes are played separately, for example on the piano or harp. (Rhapsody plays a chromatic scale between the two notes.)

A glissando can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the symbol on the nearest note. Glissandi are placed so as to reach from one note to the next note of the same tail. If the cluster containing the symbol consists of more than one note, the glissando takes effect on the top note only. Separate glissandi can, however, be added to notes of different tails in the same slot.

Spread chords



These tell Rhapsody to play the notes in a chord in a staggered fashion, producing a softer, wave-like effect. There are two symbols, the second of which shows arrow-heads denoting the direction of the spread; Rhapsody makes no difference between the two when playing them.

When a spread chord symbol is selected, a number of options appear in the Glissando

panel:

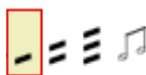


- Enter a value into the Speed writable icon, or use the bump arrows, to change the speed at which the chord is played, that is, the amount by which the notes are staggered. The speed is measured in notes per crotchet. The default value of 8 therefore represents a demi-semiquaver. The higher the number, the faster the notes are played.
- The next pair of icons determine whether the spread is performed before the beat or on the beat as indicated by the vertical line.
- The last two icons alter the direction of the spread; bottom-to-top or top-to-bottom. This option affects the positioning of the arrowhead, if that symbol is selected.

A spread chord direction can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the symbol on the nearest note. If the cluster containing the symbol consists of only one note, the direction is still placed there and printed as such, but it has no effect when played. Separate spreads can be added to chords of different tails in the same slot.

💡 In piano music, a particularly pleasing effect can be achieved by using a spread chord across two staves if the lower chord is set to play before the beat while the upper chord is set to play on the beat. The effect is one of a single chord played across the beat.

Tremolo markings



These tell Rhapsody to play a long note as a repeated series of shorter notes, to give a tremolo effect. It is a useful shorthand. The single bar tremolo plays repeated quavers; the double bar plays repeated semiquavers, and the triple bar, repeated demi-semiquavers. For example:



plays like this:



The twin tremolo is usually only applied to pairs of minims or longer notes in which case it plays the two notes alternately as repeated quavers. For example:



will play like this: (Not true!)



If a twin tremolo mark is applied to a crotchet or quaver, Rhapsody will play a faster tremolo but the tremolo beam is not printed as it would look like an ordinary beam. A tremolo bar is printed above or below the note

instead.)

A tremolo marking can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the symbol on the nearest note. If the cluster containing the symbol consists of more than one note, the tremolo is played using the top note only; further tremolo markings cannot be added to that cluster. Separate markings can, however, be added to notes of different tails in the same slot.

Trills and decorations




Decorations are additional short notes played quickly at the beginning or end of a note, and denoted by a special symbol. Trills, or shakes, instruct the player to replace a note with a series of notes played very fast, and may include a decoration. The notes used are always restricted to the parent note itself and those notes immediately above and below it in the scale. Other notes must be specified using acciaccaturas and appoggiaturas (see page 69).

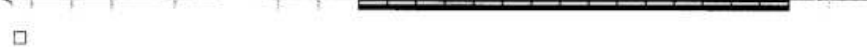
In the days of harpsichords, using a trill was the only way to sustain a note for any length of time; in modern music trills and decorations are used for special effects and to give a classical or folky feel to music.

Rhapsody provides eight different trill symbols. At the start of a piece they are defined in such a way as to play as follows:

☐ Romantic trill



☐ Romantic trill with turn



☐ Upper mordent



☐

☐ Baroque upper mordent



☐

☐ Lower mordent



☐

☐ Baroque lower mordent



☐

☐ Turn



☐

☐ Inverted turn

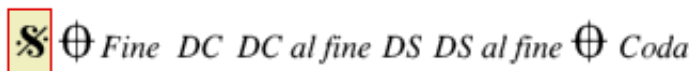


☐

A trill or decoration can be inserted wherever there is a note. If the cursor position is not exactly on a note, Rhapsody will place the symbol on the nearest note. If the cluster containing the symbol consists of more than one note, the trill is played using the top note only; a new trill cannot be added to that cluster. Separate trills can, however, be added to notes of different tails in the same slot.

It is very unlikely that these default definitions will always be suitable for the style, period, etc. of music you are writing, so each of the eight trills can have its own note sequence and speed. To define how a trill is played, a trill definition object must be placed anywhere in the score before the trill. This definition will apply to all trills and accents until the next trill definition is encountered. (see *Trill and accent definitions*, page 84). Note that redefining a trill only affects the way it is played, not its appearance in the score.

Segno, coda, da capo, and fine

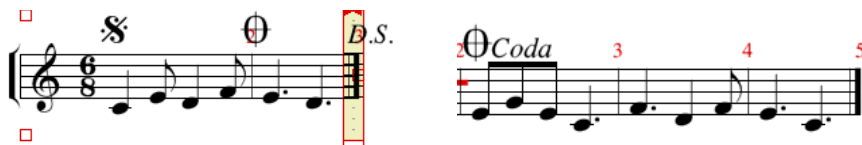


These are used to determine the large-scale repeated structure of a score. There are three ways of using them:

- the segno, S , is placed at some point in the score. When the direction *DS* (dat segno) is encountered during playing, the score skips back to the *Segno* and plays from there. If the *DS* marking was a *DS al fine*, then in addition to this the score will stop playing altogether when Rhapsody subsequently encounters the *Fine* ('end') marking.

- the coda wheel, \oplus , is placed at some point in the score. When either of the directions *DS* or *DC* (da capo) is encountered during playing, the score skips back to either the Segno or the beginning of the score (in the case of *DC*). Subsequently, when the coda wheel is reached the score skips forward to the coda, which is marked with the

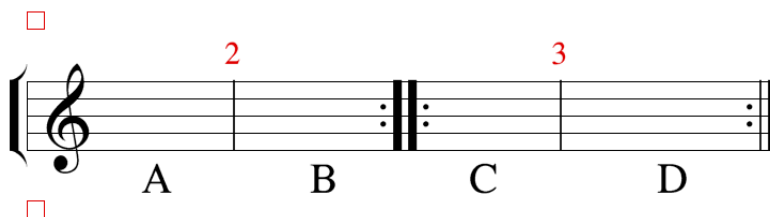
\oplus Coda direction, and stops when the end of the coda is reached. In the following example, Rhapsody plays the first two bars, returns to the Segno sign and plays bar 1 again but then skips to bars 4, 5 and 6.



- the *DC* or *DC al fine* marking is placed at the end of the score. When it is encountered the score skips back to the beginning and plays through the whole thing again. If the *DC* marking was a *DC al fine*, then the score stops playing altogether when Rhapsody subsequently encounters the *Fine* marking. In this example, all three bars are played twice, then the first bar is played once more.



In all cases, these markings are only followed if the **Repeats** option is on (select **Play options** ▶ **Repeats** on the main menu to toggle this option.) If the **Repeats** option is on, they will be followed, and the second time round (after the *DC* or *DS* instructions), normal 'barline' repeats are ignored. Thus in a score like:



the repeated sections are played twice before Rhapsody encounters the *DC*, but only once afterwards. In other words, Rhapsody will play **AB AB CD CD ABCD**.

Inserting a marking with **Select** causes it to appear in the default position for these markings; using **Adjust** allows you to specify the height up the staff at which the marking is printed, which is useful if the normal position is obstructed.

Suppress triplets and Suppress accents



The last two symbols in the window are rather different. Each inserts a flag into the score which stops Rhapsody from printing triplets or accents from there on. This is useful when, for example, a triplet figure is repeated over and over again or where virtually every note is staccato.

The flags are indicated in the score by a large square bracket, red for suppress triplets, green for suppress accents.

To restart printing of triplets or accents insert the appropriate symbol using the Adjust button.

9. Other Objects

In this chapter we shall describe the other seven panel mode selection icons.

Voice changes

Voice changes are messages sent to the MIDI interface, or to the internal sound system, to start playing a stave using a different sound. When the voice change icon is selected, the symbols window is replaced by a new set of icons:

Modern MIDI instruments offer many hundreds of tones to choose from.

At the highest level, these are divided into what Rhapsody calls *Sections*. Typically, these include an instrumental section, one or more percussion and/or sound effects sections. If you click on the **Menu** button to the right of the Section icon, a menu will appear for you to select from.

At the next level down, each section contains up to 128 tones, each of which may be further subdivided. For convenience, the 128 basic tones are divided into a number of groups eg Piano tones, string tones etc. Furthermore, each tone may be divided into a number of subtle modifications to the tone. Clicking on the menu button to the right of the Tone icon leads to a multi-level menu which allows you to select the right sound.

The contents of these menus are determined by the files present in the MidiSetup directory inside Rhapsody. Some MIDI instruments, particularly older ones, do not use Sections at all; accordingly, the icons may be greyed out according to which MIDI instrument is assigned to the current port and channel. All of this information can be altered to match your own particular setup: see the chapter on Customising Rhapsody, page 137.

In making these two selections, what you are in fact doing is choosing three numbers which in MIDI jargon are called the program change number, the MSB bank change number and the LSB bank change number. If you are into this sort of thing (or if you are creating a score for a setup without a MidiSetup entry), you can set these numbers directly by clicking on the Advanced setup icon. For more detail on this, see page 107.