QCManual2.0

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(Bo Lincoln & Calle Englund)

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1.2   Distribution

DISTRIBUTION:

You are hereby given permission to distribute the

QC20.LhA archive (or the same decrunched), as long as it is

redistributed in its original unmodified form. You may NOT take any fee

for the program itself, only the costs for the media itself.

Files included in this package:

* QuadraComposer2.0 --- The program

* QCManual2.0.TXT --- The text manual

* QCManual2.0.guide --- This file

* InstallQC2.0 --- The Installer script

* QCReplay.s --- An ASM source

* QCFastReplay.s --- An ASM source

* QC.font sizes 6 & 8 --- The font

+ icons

SHAREWARE:

QuadraComposer is SHAREWARE, and if you use it you should pay the

shareware fee of US$ 20 (or the equal amount is SEK) (The fee

should be cashable in OUR local banks, so a $20-bill is the most

practical payment...). Please support us.

SWEDEN ONLY: Du kan betala på Bo Lincolns postgiro 920 74 13-7

(repeat 920 74 13-7).

COPYRIGHTS:

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& Calle Englund).

QC makes use of reqtools.library for the requesters.

ReqTools is Copyright © Nico François.

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1.3   How to use QuadraComposer

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1.4   Music with QuadraComposer

HOW TO MAKE MUSIC WITH QUADRA COMPOSER:

BASICS:

Notes

Sample Number

Patterns & Positions

EFFECT COMMANDS:

0yz Arpeggio

1yz Pitch Slide, Up

2yz Pitch Slide, Down

3yz Tone Portamento

4yz Vibrato

5yz Volume Slide + Sustained Tone Portamento

6yz Volume Slide + Sustained Vibrato

7yz Tremolo

9yz Set Sample Offset

Ayz Volume Slide

Byz Position Jump

Cyz Set Volume

Dyz Pattern Break

Eyz see below.

Fyz Set Speed / Tempo

EXTENDED COMMANDS:

E0z Set Filter

E1z Fine Pitch Slide, Up

E2z Fine Pitch Slide, Down

E3z Set Glissando

E4z Set Vibrato Waveform

E5z Set Finetune Value

E6z Pattern Loop

E7z Set Tremolo Waveform

E9z Retrig Note

EAz Fine Volume Slide, Up

EBz Fine Volume Slide, Down

ECz Note Cut

EDz Note Delay

EFz Pattern Delay

Effects that differ from the NT-Format

1.5 Decimal and Hexdecimal Numbers

DECIMAL AND HEXADECIMAL NUMBERS:

All numbers, EXCEPT for percent numbers, are

hexadecimal. Hexadecimal?, you ask. Calm down, it will be explained.

Our normal number system has the base 10; The first place has the

value 1, the second 10, the third 100, and so on. E.g:

236

2*100///

3*10_//

6*1__/

= dec 236

In hexadecimal, the base is dec 16:

3A4

2*256///

10*16// <--- Those numbers showed in decimal.

4*1__/

= dec 676

But then there must be 16 numbers!? Right, but since we only

have our normal 10, you use A, B, C, D, E and F as 10, 11, 12, 13, 14

and 15. If you want to type dec (decimal, base 10) 11 in hex, it will

be B. Simple. The reason of using this strange (?) system is that it

takes less space; With just two digits you can write numbers up to hex FF

(dec 255), not only up to dec 99.

1.6 Strange Words

STRANGE WORDS:

BPM = Beats Per Minute

EMOD = Extended MODule, the preferred disk format when using QC.

LBM = Left Mouse Button

RMB = Right Mouse Button

1.7 Up / Down Gadget

UP/DOWN GADGET:

+--+

| /|

|/ |

+--+

Pressing the LMB over the up/down-wards pointing triangle will

in/de-crease the value in the recessed box beside. If the RMB is

pressed simultaneously, the rate of change will increase.

All values are displayed in hexadecimal , except for the percentage values

(otherwise it would be a bit confusing).

1.8   Cycle Gadget

CYCLE GADGET:

+---+

|/->|

|| |

|\-/|

+---+

Cycles through multiple choices then clicked on with LMB . Pressing shift

while clicking will make the cycle go backwards.

1.9   Little Red Dots

LITTLE RED DOTS:

If a gadget has a little red dot in its upper right corner, then

there is an option window attached to it. Clicking RMB brings it up.

1.10   Menu Window

MENU WINDOW:

This is the only window that must be open all the time. From this you can

open the other windows. In this window are also the module control gadgets.

+--+--+

| 1| 2|

+--+--+

| 3| 4|

+--+--+

| 5| 6|

+--+--+

| 7| 8|

+--+--+

| 9|10|

```
+--+--+
+--+--+
|11|12|
+--+--+
|13|14|
+--+--+
|15|16|
+--+--+
```

1) Opens the main note window .

2) Opens the sample window .

3) Opens the disk operation window .

4) Opens the mixer window .

5) Opens the text display window .

6) Opens the note edit window .

7) Opens the spectrum analyzer window .

8) Opens the scope window .

9) Opens the preferences window .

10) Displays the About requester.

11) Plays the module from the current position.

12) Plays the current pattern.

13) Starts recording.

14) Starts recording the current pattern.

15) Stops the music, turns the sound off and turns edit off.

16) Turns edit on.

When you press the CLOSE gadget in the upper left corner, the whole program

will be ended.

1.11   Main Note Window

MAIN NOTE WINDOW:

This is the main window of Quadra Composer. It displays the current

pattern, and it contains most gadgets for note editing.

```
+----------------------------------------------+
| On On 1 On On |
+-----+----------------------------------+-----+
| 3 | | 12 |
| 4 | | 13 |
| 5 | | 14 |
| 6 | | 15 |
```

```
| 7 | | 16 |
| 8 | 2 | 17 |
| 9 | | 18 |
| 10 | | 19 |
| | | 20 |
| | | 21 |
| 11 | | |
+-----+---------------------------------+-----+
```

1) The window dragbar. It displays four On/Off's, which informs you about the voice status.

2) The pattern display. This is the place where you edit the patterns, by using the keyboard. To edit the notes you must be in edit mode (press [space]). When you go into edit mode the cursor turns red (unshaded). To move around in the pattern, use the arrowkeys (NOT on the numeric keyboard). You can mark notes by dragging the mouse.

3) Pos. (Position) gadget. Use this to cycle trough the positions.

4) Patt. (Pattern) gadget. This is the pattern attached to the current position. You can change this to "mix" the patterns together to a song. But, it's better to use the mixer (see mixer window) instead to put your song together.

5) C.patt. (Current Pattern) gadget. This gadget is used for changing the current displayed pattern, i.e NOT the pattern attached to a position.

6) Pattl. (Pattern Length) gadget. Use this gadget to change the length of the current pattern. The length may vary from 1 to 256 lines, but the value displayed is the number of the last line (number of lines - 1).

7) Sample gadget. This gadget is actually duplicated, it can also be found in the sample edit window. Use this gadget to change the current sample number. You can use up to 255 samples (number zero cannot be used).

8) Tempo gadget. This gadget sets the BPM rate. The tempo may vary from 32 to 255 (hex 20 to FF) BPM . Normally this rate is set to 125 (hex 7D).

9) Timing gadget. Toggles between CIA (CI) and vertical blank (VB) timing. Normally you should use the CIA timing, because you can only change tempo in this mode. The vertical blank timing is mostly used by demo coders, who don't want to waste the level 6 irq on music. If you use the vertical blank timing in the USA the speed go up 20% (because of NTSC).

10) Songl (Song Length) gadget. Decides how many positions will be used.

11) Cut & Paste gadgets. Use these to cut, copy, paste and clear the

marked block of the pattern.

12) E.skip (Edit Skip) gadget. Sets the number of rows to jump down after typing a note.

13) Quant. (Quantisizing) gadget. Quantisizing lets you set if your notes will be on every two rows, every three rows, and so on. Very useful if you're recording e.g a drumbeat in realtime.

14) Multi gadget. If you turn this on, the cursor will skip to another track after typing a note.

15-18) Multi 1-4 gadgets. Multi 1 sets where the cursor will skip after typing a note in track 1, and so on.

19) A.echo (Auto Echo) gadget. This sets whether the funny little effect called Auto Echo will be on or off. Auto Echo makes a kind of echo after each note typed, based on the default volume of the sample.

20) Ae.spec (Auto Echo Space) gadget. Sets the space between the echoes.

21) Ae.cut (Auto Echo Cut) gadget. This is the percentage of volume cut off the volume for each echo. When the volume reaches 4 or lower, the echo stops.

1.12   Sample Window

SAMPLE WINDOW:

Well, this is actually the biggest part of Quadra Composer (in bytes), so we hope that it will be useful. You don't actually have to use Quadra Composer as a music program, you can use it only as a sample edit program. The sample editor supports 16 bit editing, but you can still not load and save 16 bit sounds (sorry :-(). If you own a sample synth, and would like to use Quadra Composer to edit the samples, please send us a reference for the sample and disk format, and we'll try to implement some 16 bit load and save functions.

```
+-----------------------------+
| |
| |
| 1 |
| |
| |
| |
+-----------------------------+
| 2 7 13 18 |
| 3 8 14 19 |
```

| 4 9 15 20 |

| 5 10 16 21 |

| 11 17 22 |

| 6 12 23 |

+-----------------------------+

1) The sample display. This is where the current sample, or a part of it,

is shown. You can mark the sample or a part of it by dragging the mouse.

2) Period gadget. Sets the standard period, used by the "Play" gadgets,

and some effects.

3) Volume gadget. Sets the standard volume of the current sample.

4) F.tune (Finetune) gadget. Sets the finetune value of the current

sample.

5) Loop gadget. Turns the loop of the current sample on / off.

6) Cut & Paste gadgets. Cuts / copies / pastes / deletes the marked range

in the sample.

7) Length gadget. Lengthens / shortens the sample.

8) Play All gadget. Plays the whole sample.

9) Play Display gadget. Plays the current display (most often the same

as the whole sample).

10) Play Range gadget. Plays the range (if present).

11) Show All gadget. Shows the whole sample.

12) Show Range gadget. Zooms in so that only the present range will be

displayed.

13) Sample gadget. This gadget can also be found in the main note window.

It changes the current sample number.

14) Range All gadget. Sets the range to the whole sample.

15) Zoom Out gadget. Shows 1/16 more of the sample (if possible).

16) Copy Sample + Info gadget. Displays the copy sample window. If you

press copy in that window, the current sample + name + vol etc. will be

copied to the desired destination.

17) Clear Sample + Info gadget. Clears the whole sample + name + vol etc.

18) Backw. (Backwards) gadget. Reverses the sample or the range.

19) Inverse gadget. Turns the sample up & down.

20) Tone gadget. Plays a tone. This is used when tuning your sample.

In the attached option window you can set the period and the voice of

the tone.

21) Sample gadget. When pressing this gadget the computer will be frozen,

a window opened, and the sampler data will be heard in your speakers. In

the window the data will be displayed, so that you can adjust the input

volume. If you press RMB , the sample operation will be canceled. Otherwise
the program will start sampling as you press LMB , and continue until you
press LMB again, or until the sample is 128 kB (hex 1FFFE bytes) long.
In the option window you can turn Autostart on / off, set Autostart
Sensibility, and turn Oversample on / off. Autostart will cause the
sampling operation to start immediately when a sound is heard (loud
enough). Oversample samples faster than the actual sample period, to get
rid of noise from the sampler.

22) Edit gadget. Converts the current sample to 16 bit, and opens the
sample edit window. All disk operation is disabled. If you want to listen
to the sample the processor will be used to play it (since the Amiga can
only play 8 bit samples), which will cause the computer to freeze until
you either press a mousebutton, or 'til the whole sound is played.

1.13 Sample Edit Window

SAMPLE EDIT WINDOW:

This is the window which contains all the fun parts of sample editing,

the effects...

```
+-----+-----+
| 1 | 9 |
| 2 | 10 |
| 3 | |
| 4 | 11 |
| 5 | 12 |
| 6 | 13 |
| 7 | 14 |
| 8 | 15 |
+-----+-----+
```

1) Tune gadget. Use this function to tune samples so that they fit
together. First, turn on the 'Tunetone'. Second, find the matching
period and finetune (by listening), and set the values in the Period
and F.Tune gadgets. Third, if you want, you can set the desired Tune To
period in the Tuning Options window. Fourth, press the 'Tune' button.

2) Volume gadget. Used to change the volume of the sample.

In the window which appears, you can find the following gadgets:

The Startvolume is the start value, and it will slide over to Endvolume.

Maximum is a function which scans the sample to find out how much the

volume can be raised without cutoff. Norm sets the sliders to 100%.

Out sets the Startvolume to 100%, and the Endvolume to 0%, to create a

fade out. Guess what In is...

If range is present, the volumechange will only affect it.

3) Mix gadget. This function will mix the current sample with the copy buffer

(it doesn't matter if the copy buffer is 16 or 8 bit). The Startmix

decides how much the mixed sample will be affected by the sample

and how much it will be affected by the copy buffer. E.g: If Startmix

is set to 75%, the current sample will have 75% of the volume, and the

copy buffer 25%. Just like the Startvolume the Startmix will slide over

to the Endmix.

If present, it will only affect the range.

4) Oct. Up (Octave Up) gadget. Doubles the sample frequency.

5) Oct. Down (Octave Down) gadget. Halves the sample frequency.

6) Echo gadget. Creates an echo in the sample. Echo rate decides how fast

the echo will return. Decay rate decides how fast the echo will vanish.

If you turn on Re-Echo, each echo will return more than once. Echo

and Reverb are presets, just like In and Out in the volume window.

If present, the range will be used as echo.

If you set the sample cursor while the echo window is open, the Echo

Rate will be adjusted so that the first echo will be on the sample cursor

position.

7) Flange gadget. This function creates a "swirl" effect in the sample.

In the flange window you can set the depth and the frequency of the

flange.

8) OK gadget. Converts the 16 bit edit buffer to 8 bit, and replaces the

old 8 bit sample. Then it closes the edit windows.

9) Chord gadget. This is a kind of Tune and Mix macro, which creates a

chord. You can mix up to four notes to a chord. Major, Minor, Major

Sept., Sus2, Sus4 and Minor Sept. are presets, which builds a chord based

on the first note.

10) Synth gadget. This is a rather BIG function, which makes sounds by

adding sinewaves (additive synthesizer). In the window which appears you can

find the following gadgets:

a) Cut Off Envelope. Lets you draw a freehand filter curve.

b) Volume Envelope. Lets you draw a freehand volume curve.

c) Pitch Envelope. Lets you draw a freehand pitch curve. Every pixel

is a half-tone, and the red lines represent "C".

In all of the windows above, you can find something called LFO (Low

Frequency Oscillation). These adjust the envelopes by pulling 'em up and

down.

d) Resonance gadget. Lets you draw a freehand resonance curve. What

you actually do is to change the volumes of the different frequencies.

e) Phase gadget. Lets you draw a freehand phase distortion curve. The

curve is a kind of translation table for angles. E.g if it is a normal

corner to corner straight line, 10° will be 10° when the sound is made.

If you draw the line from the left-bottom corner to the middle of the

right edge, 10° will actually be 5°.

NEW FOR 2.03:

f) Noise Envelope. Lets you draw a freehand noise curve.

g) Load Envelopes. Asks for an IFF ENVL (Envelopes) file to load. This file

contains all of the data above.

h) Save Envelopes. Saves your current envelopes etc. as an IFF ENVL file.

The length of the sample will be decided by the Length gadget. The

length must be at least 256 (hex 100) bytes.

11) Delta 1 Filter gadget. This is a relatively "soft" filter. Use it for

"cutting the edge" of those "sharp" samples. Doesn't affect noise.

If present, only the range will be affected.

12) Delta 2 Filter gadget. Displays a window with a Cut Frequency slider.

If you try to filter a low frequency, the sample will sound a bit

strange, because the filter also cuts all the multiples of the cut

frequency.

The Range gadget will set the the Cut Frequency so that a wave with

the same length as the range will be cut.

If the range is set while filtering, only the range will be affected.

13) Boost 1 "Filter" gadget. Can make relatively "sharp" sound even worse...

14) Boost 2 "Filter" gadget. This filter can actually "anti filter" samples,

i.e make the sound clearer. If you use it more, it makes the samples

really "sharp".

15) Cancel gadget. Forgets the 16 bit sample, and goes back to the old 8

bit sample.

1.14   Disk Operation Window

DISK OPERATION WINDOW:

This is the menu which contains all the disk operation functions (load, save).

+------+

| 1 |

| 2 |

```
| |
| 3 |
| 4 |
| 5 |
| |
| 6 |
| 7 |
| |
| 8 |
| 9 |
| |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
+------+
```

1) Load Module gadget. Displays a file requester, in which you should

pick the desired module. If you load a new module, the old one will be

lost. Quadra Composer 2.0 supports IFF EMOD and Noisetracker modules.

2) Save Module gadget. Displays a requester asking which module format

you want to use. Default, and the best, choise is "IFF EMOD ", which is an

extension of the other choice, "Noisetracker".

3) Load Pattern From Module gadget. Lets you pick an IFF EMOD . The

patterns of the module will be displayed in a window. To load a pattern on

top of the current pattern (the length will be adjusted), just double

click on it.

In the option window, you can turn Load Samples on / off. Load Sample mean

that all the samples in the loaded pattern will be added to the module,

unless you don't already have a sample with the same name. This option

goes for Load Track From Module too.

A little tip: You can build up "clip" modules with e.g drumtracks, which

you later can include in your music.

4) Load Track From Module gadget. See above.

5) Load Sample From Module gadget. See above.

6) Load Sample gadget. Loads a sample, IFF 8SVX or raw.

7) Save Sample gadget. Lets you pick a file format, IFF 8SVX or raw, in

which the sample will be saved.

8) Load Settings gadget. Loads your previously saved settings from the file

"s:QuadraComposer.prefs".

9) Save Settings gadget. Saves your settings.

10) Use Sample List gadget. Displays the sample list window. A sample list is

just a list in which names and paths of samples are. This is very useful

if you have loaded all your sample disks to the list. You can then easily

find THAT sample you're looking for. Another advantage is that you don't

have to wait for the computer to read the directory every time.

To load a sample from the list, just double click on it. If the disk

is not in your drives, the computer will ask for it as usual.

11) Load Sample List gadget. Loads your previously saved sample list file

(s:QuadraComposer.samplelist). The sample list file is actually an ASCII

text, which you can edit from any text editor.

12) Temporary Sample List gadget. Asks for a directory, which will be read

and used as a temporary sample list. This is used if you want to load

more than one sample from a disk which is not in your sample list.

13) Add Sample To List gadget. Displays a multiselect file requester, from

which you can choose one, or by pressing shift, more, samples to the

current sample list.

14) Save Sample List gadget. Saves the current sample list to the file

s:QuadraComposer.samplelist.

1.15 Mixer Window

MIXER WINDOW:

This window is used to mix your patterns together to a song.

```
+----------------------+-----+
| | |
| | |
| | |
| | |
| 1 | 2 |
| | |
| | |
| | |
+----------------------+-----+
| 3 4 | |
+----------------------+-----+
```

1) Pattern list display. Here are the 256 patterns plus numbers

listed. If you click on a pattern, it will be marked, and if you drag it,

you can insert the patternnumber in the position list.

2) Position list display. Here are the <songlength> positions listed. Just

like the pattern list, you can mark positions, and move them around by

dragging with the mouse.

3) Paste gadget. Inserts the marked pattern number in the position list,

at the marked position.

4) Clear gadget. Deletes the marked position.

1.16   Text Window

TEXT WINDOW:

This is just a tiny text window.

```
+------------------+
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
+------------------+
```
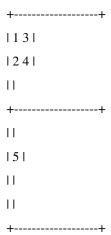
1) Song name gadget.

2) Copyright / composer name gadget.

3) Current sample name gadget.

4) Current pattern name gadget.

5) Status line.

1.17   Note Edit Window

NOTE EDIT WINDOW:

Here are some note and track editing functions.

```
+------------------+
| 1 3 |
| 2 4 |
| |
+------------------+
| |
| 5 |
| |
| |
+------------------+
```

1) Expand Track gadget. This function doubles the space between notes in
the current track, starting from the current line.

2) Swap Tracks gadget. Swaps the active track with another.

3) Clear Track gadget. Clears the current track from the current line.

4) Exg (Exchange) Sample In Track gadget. Replaces the current sample
number in the track with a new one.

5) Transposing gadgets. These gadgets lets you transpose notes up or
down. Active sample means that only notes with the active sample number
will be affected.

1.18   Spectrum Analyzer Window

SPECTRUM ANALYZER WINDOW:

This is a little window showing a spectrum analysis of the sounds being
played. It works remarkably well, although it doesn't use FFT. If you size
the window to maximum size, the spectrum analyser will change, and get
bigger (and slower).

When the analyser is small, each line represents 1/4 of an octave.

Otherwise the each line represents 1 note.

1.19   Quadrascope Window

QUADRASCOPE WINDOW:

This is also a way of showing the samples being played. If the window is
small, four "scopes" are being displayed, one for each voice. Otherwise
only one, including all voices is displayed.

1.20   Preferences Window

PREFERENCES WINDOW:

```
+-----------------------+
| 1 3 |
| 2 4 |
| |
| 5 |
| |
| 6 7 8 |
+-----------------------+
```

1) Screen Mode gadget. Lets you pick a screen mode, minimum 640x256

pixels.

2) Palette gadget. Lets you adjust the palette.

3) Big Scope Accuracy slider. Sets how many pixels should be displayed
per voice in the big scope.

4) Big Spectrum Accuracy. Sets how many frequencies the analyser should
try to find.

5) Hex - Dec gadgets. This is a translator from hexadecimal to decimal
and decimal to hexadecimal. Just type the number in the gadget and press
<enter>.

6) Fake Chipmem gadget. If this is on, Quadra Composer will try to use
the internal fast memory expansion on A500's as chipmem. This will not
work if you don't have ECS.

7) RMB Activate gadget. If this is on, you'll be able to activate windows
with the right mouse button.

8) Fast Graphics gadget. Fast graphics means that the window graphics is
drawn by internal _fast_ functions in Quadra Composer. If it's off
graphics.library will be used. Note: If you have a graphics card, like
Merlin, Picasso, Retina etc. you _must_ turn this function off!

1.21   Keyboard Commands

KEYBOARD COMMANDS

====================

Many of these commands can also be found in the menus, using Amiga standard

(amiga + key).

The main keyboard is used for entering notes.

(Am. layout)

2 3 6 7 8 9

Q W R T Y U I O P Higher octave

___/

_____ The same notes

___

/ \

S D G H J L ;

Z X C V B N M , . / Lower octave

The default lower octave is 2.

MISC KEYBOARD COMMANDS.

======================

RIGHT SHIFT Record song.

RIGHT ALT Play song.

RIGHT AMIGA Play pattern.

< Turn off all samples. (Not available on some Am.

keyboards.)

SPACE Toggle editing on/off.

RETURN Insert blank row in track.

A-RETURN Insert blank row in pattern (all tracks).

C-RETURN Insert blank row in track (effect cmd only).

BACKSPACE Delete previous row and move rest of the track upwards.

A-BACKSP. -"- pattern -"-

C-BACKSP. As BACKSPACE but only effect command.

DELETE Delete note/effect of the current track, row.

S-DELETE Delete note+effect -"-

TAB Move cursor to next track (right).

S-TAB -"- prev -"- left

F1 Set lower octave to "1"

F2 Set lower octave to "2"

F3 Cut block to buffer.

S-F3 Cut entire track (notes only).

A-F3 Cut entire pattern (notes only).

F4 As F3, but Copy instead.

F5 Paste buffer.

S-F5 Paste from top of track (notes only).

A-F5 Paste from "top left corner" of track (notes only).

F6-F10 Move to "bookmark", default are 00/10/20/30/40

S-(F6-F10) Set "bookmark".

A-(F6-F10) Play pattern from "bookmark".

C-(F6-F10) Record -"-

S-(1-9) Store current effectcommand in effectbuffer 1-9.

A-(1-9) Paste effectbuffer 1-9 into current cursorpos.

C-(1-9) Set editskip to 1-9. Ie the number of rows the editor

jumps after a note is struck.

A-(Z,X,C,V) Toggle voice 1-4 on/off

A-MINUS (Main keyboard, Am. layout)

Copy previous effect command and decrease its

argument.

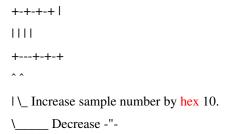A-PLUS (Main keyboard, Am. layout)

Copy prev. fx cmd and increase its arg.

A-\ Copy prev. fx cmd.

C-A Toggle current voice on/off.

C-C Copy block.

C-D Clear block.

C-E Expand track.

C-F Toggle filter on/off.

C-G Toggle AutoEcho on/off.

C-I Paste buffer.

C-K Clear to end of track.

C-M Toggle MultiMode on/off

C-P Paste buffer.

C-Q Turn all voices on.

C-R Restore "bookmarks".

C-T Swap tracks.

C-V Paste buffer.

C-X Cut block.

ARROW KEY OPERATION

==================

UP Move cursor up.

DOWN Move cursor down

LEFT Move cursor left.

RIGHT Move cursor right.

S-UP Move cursor up 8 rows.

S-DOWN Move cursor down 8 rows.

S-LEFT Decrease position.

S-RIGHT Increase position.

C-LEFT Decrease sample number.

C-RIGHT Increase sample number.

A-LEFT Decrease current pattern number.

A-RIGHT Increase current pattern number.

NUMERIC KEYPAD (Not available on A600. ;-(

=======================================

+-+-+-+-+

|1|2|3|4|

+-+-+-+-+

|5|6|7|8|

+-+-+-+-+

|9|A|B|C|

+-+-+-+-+

|D|E|F|0|

```
+-+-+-+ |
| | | |
+---+-+-+
^ ^
```

| _ Increase sample number by hex 10.

_____ Decrease -"-

1.22   Basics

BASICS:

Quadra Composer works with four voices (limited by the Amiga), which
are represented by the four tracks you can see in the main note window.
These four tracks of a certain length form a pattern. Up to 256 patterns
can form a song, and finally, a song plus all samples form a module.

1.23   Notes

NOTES:

The first space in every line of a track is reserved for the note.

C#101000

_/

__ The note.

The note range is from C-1 (lowest) to B 3 (highest). Each time the track
finds a note when playing, it will play the sample connected to it, using
the note frequency. But, it's not like a synthesizier, since the sample will
not stop when you release the key. In keeps playing until the entire sample
is played, or until you play another sample in the sample voice. If you
want to cut a sample before it's completely played, you'll have to use the
volume effect command (see chapter 2.1).

1.24   Sample Number

SAMPLE NUMBER:

To each note there must be a sample number, so that Quadra Composer will
know what sound to play.

C#101000

\/

__ The sample number.

The sample number will automatically be written when typing a note.
Using this little knowledge you can make your first modules. If you want to
make the more advanced, check out the next chapter.

1.25   Patterns & Positions

PATTERNS & POSITIONS:

When you've made some patterns, you can mix 'em together to a song, either

by using the Pos. and Patt. gadgets, or by using the mixer.

1.26   Basics

EFFECT COMMANDS:

The effect command is the last three (3) digits of each line of a

track.

| C 101xyz |

^^^^^^^

_/\/_/____ Effect command

\ _____ Sample number

_____ Note.

1.27   Arpeggio

Command 0yz: ARPEGGIO:

Arpeggio is a rapid pitch change. The pitch changes between the

played note and the notes Y resp. Z halftones higher.

1.28   Pitch Slide, Up

Command 1yz: PITCH SLIDE, UP:

Slides the pitch up YZ halftones. The resulting pitch cannot be

higher than the highest possible pitch (B 3).

1.29   Pitch Slide, Down

Command 2yz: PITCH SLIDE, DOWN:

Slides the pitch down YZ halftones. The resulting pitch cannot be

lower than the lowest possible pitch (C 1).

1.30   Tone Portamento

Command 3yz: TONE PORTAMENTO:

Slides the pitch up/down to played the note at YZ halftones per

frame. The effect must be reactivated on each row. If YZ=00 then the

last YZ will be used.

| C 101000 |

| C 201302 |

| 00300 |

| 00300 |

| ... |

When the desired pitch is reached, the effect will not do anything.

1.31   Vibrato

Command 4yz: VIBRATO:

Makes a vibrato effect on the sample played. The command must be

reactivated on each row. Y is the speed of the vibrato and Z is the

depth. If an argument is "0" then the previous value used will be

used.

| C 101445 | +------------------------------------+

| 00406 | <--| Makes the vibrato deeper and deeper |

| 00407 | +------------------------------------+

| 00408 |

| 00409 |

1.32   Volume Slide + Sustained Tone Portamento

Command 5yz: VOLUME SLIDE + SUSTAINED TONE PORTAMENTO:

Adds a volume slide to a tone portamento. The portamento must be

initialized with the [3yz] effect before this effect can be used. The

Y argument represents the volume increase rate and Z the decrease.

| C 101000 | +--------------------------------------+

| C 201305 | <--| Continues the portamento and slides |

| 00501 | | the volume down |

| 00501 | +--------------------------------------+

| ... |

1.33   Volume Slide + Sustained Vibrato

Command 6yz: VOLUME SLIDE + SUSTAINED VIBRATO:
Similar to command [5yz], see above. The vibrato should be
initialized before using this command.

1.34   Tremolo

Command 7yz: TREMOLO:
Creates a volume vibrato. The speed is set with the argument Y and
the depth with Z. If an argument is "0" then the last value for that
argument is used.

1.35   Set Sample Offset

Command 9yz: SET SAMPLE OFFSET:
Used only when a note is played, to skip a bit into the sample. The
argument YZ is multiplied with hex 200 and that many bytes of the
sample are skipped.
| C 101923 | <--| Skips hex 23 * 200 = 4600 bytes |
NOTE: This differs from the NT-format, where the offset was hex
YZ*100.

1.36   Volume Slide

Command Ayz: VOLUME SLIDE:
Slides the volume up at the speed set by Y or down at the speed set
by Z. The effect must be reactivated on each row.
| C 207A20 | +----------------------+
| 00A20 | <--| Slides the volume up. |
| ... | +----------------------+

1.37   Position Jump

Command Byz: POSITION JUMP:
Skips the rest of the current pattern (It's a good idea to pull the
length down to save some bytes of memory...) and jumps to position
hex YZ.
NOTE: This differs from the NT-format, where the argument to this
effect was given as a decimal number.

1.38   Set Volume

Command Cyz: SET VOLUME:

Set the volume for a channel. The argument YZ sets the new volume.

The volume must be between hex 0 and 40.

1.39   Pattern Break

Command Dyz: PATTERN BREAK:

Skips the rest of the current pattern (see command Byz) and the first

YZ rows of the next pattern (YZ should not exceed the length of the

next pattern).

1.40   Set Speed / Tempo

Command Fyz: SET SPEED/TEMPO:

Sets the speed of a pattern (and the ones that follow...) if the

argument YZ is less than or equal to hex 1F or the tempo if YZ is

higher than hex 1F.

The speed is normally the number of picture frames or vertical blanks

(1/50 second PAL or 1/60 second NTSC) to wait between each row of a

pattern. The default speed is 06, ie 0.12 seconds (PAL) or 125 beats

per minute.

If the tempo is set QuadraComposer will switch from VBL timing (125

BPM , PAL) to CIA timing. The default tempo is hex 7D (125 BPM ,

again). The tempo rating assumes a default speed setting.

TECHNOTE: If the tempo is set to anything else than 7D, then the

level 6 CIA interrupt must be used. If the tempo is set high then the

replay takes more time each frame (the replay interrupt also will get

out of phase with the screen refresh, so worst case time consumption

can get high (or at least unpredictable) even when using lower tempo,

check the replay routine...).

1.41   SetFilter

Command E0z: SET FILTER:

Used to switch the internal audio filter on or off. If Z is "0" the

filter is switched on and if Z is "1" the filter is switched off.

NOTE: Some old amiga's don't have this feature.

1.42   Fine Pitch Slide, Up

Command E1z: FINE PITCHSLIDE, UP:

Slide the pitch up a little bit, Z is simply added to the pitch.

1.43   Fine Pitch Slide, Down

Command E2z: FINE PITCHSLIDE, DOWN:

Slide the pitch down a little bit, Z is simply subtracted from the pitch.

1.44   Set Glissando

Command E3z: SET GLISSANDO:

Turn glissando on (Z = "1") or off (Z = "0"). Glissando is used with

portamento. If it is turned on, then the portamento will be done

halftone by halftone, like "walking" up or down the piano.

TECHNOTE: This effect can use up a lot of time, check the replay

routine...

1.45   Set Vibrato Waveform

Command E4z: SET VIBRATO WAVEFORM:

Simply selects the waveform used for vibrato effects. Z=0 Use

sinewave (default) Z=1 Use ramp down Z=2 Use squarewave

1.46   Set Finetune Value

Command E5z: SET FINETUNE VALUE:

Sets the finetune value for a channel. The finetune can vary from -8

to 7 (using 2's complement, ie 0 to 7 are represented by the numbers

0 to 7, and -8 to -1 are represented by the numbers 8 to F).

| C 101E5E | <--| Set the finetune value to -2 |

1.47   PatternLoop

Command E6z: PATTERN LOOP:

Used for creating loops in patterns. First the first row of the loop

must be defined, by using Z = 0, and then at the end of the loop, the

number of "jump backs" are defined with Z > 0. Nested loops (inside

each other) are not possible.

| C 303E60 | <--| Beginning of the loop |

| ... |

| 00E64 | <--| The loop will be replayed 4 times, then |

| continue |

1.48 SetTremoloWaveform

Command E7z: SET TREMOLO WAVEFORM:

Like command E4z, but sets waveform for tremolo instead.

1.49 Retrig Note

Command E9z: RETRIG NOTE:

Plays the note every Z VBL's (see effect Fyz). Useful is you want to

play the pattern slowly, but want say, a hihat playing rapidly.

1.50 Fine Volume Slide, Up

Command EAz: FINE VOLUMESLIDE, UP:

Simply adds the argument to the current volume of the channel.

1.51 Fine Volume Slide, Down

Command EBz: FINE VOLUMESLIDE, DOWN:

Simply subtracts the argument from the current volume.

1.52 Note Cut

Command ECz: NOTECUT:

Cuts the note after Z VBL's (see effect E9z), ie sets the volume to

00.

1.53 Note Delay

Command EDz: NOTE DELAY:

Waits Z VBL's, before playing the note.

1.54 Pattern Delay

Command EFz: PATTERN DELAY:

Delays the pattern Z VBL's. Useful for creating a short pause in the

music.

1.55   Effects That Differ From the NT-Fornat

EFFECTS THAT DIFFER FROM THE NT-FORMAT:

Some effects differ slightly from the nt-format. These are effect

9yz, 4yz (new for 2.03), and effect Byz. These differences are autimagically converted

when a module is loaded/saved in NT-format.

1.56   Appendix A

APPENDIX A IFF EMOD FILE FORMAT:

The standard EMOD fileformat is using the standard IFF (not

SMUS!) format. It was necessary to create a new fileformat, to be able

to include all the new features (compared to the NT-fileformat), like:

* 255x128 kb samples.

* 256x256 rows named patterns.

* 255 positions.

* Better internal format for pattern data - 4 bits left per note

for future expansion.

The patterndata is put in the file row by row, 4 bytes for each

note, and 16 bytes for each row:

SampleNr NoteNr Empty Effect

cmd.

-------- -------- ---- -------------

00000000 00000000 0000 0000-00000000 <--- Bits

-------- -------- ---------- --------

Byte 0 Byte 1 Byte 2 Byte 3

The notenumber is a number from 0 to 35 which corresponds to a

note (C 1 to B 3). To get the period you'll have to use a list. The following

are the IFF chunks of the EMOD fileformat. If you want to add something

new to the module like a long comment or a text, please make a new

chunk. A properly made program should just ignore the unknown chunks.

Type Size Description

~~~~~~~~~~~~~~~~~~~~~~~~~~~

char 4 "FORM"

long 4 Size of file from offset 8

*********** Infochunk ************

char 4 "EMOD" ;Extended Module

char 4 "EMIC" ;Extended Module Info Chunk

long 4 Size of chunk

word 2 Version of IFF EMIC-chunk

char 20 Name of song

char 20 Composer

byte 1 Tempo

byte 1 Number of samples

byte 1 Sample nr

byte 1 Volume

word 2 Samplelength in words

char 20 Name of sample

byte 1 Controlbyte bit 0=loop on/off

byte 1 First 4 bits finetune

word 2 Repeat in words ;Length to loop repeatpoint

word 2 Replen in words ;Length of loop

long 4 Offset to the sample from the very beginning of the

file

byte 1 Pad

byte 1 Nr of patterns

byte 1 Pattern nr

byte 1 Length of pattern in rows - 1

char 20 Name of pattern

long 4 Offset to the pattern from the beginning of the file

byte 1 Pad

byte 1 Nr of positions

byte 1 Patternnumber

byte 0 or 1 Extra byte to wordalign if necessary.

******** Pattern data chunk **********

char 4 "PATT" ;Patterndata

long 4 Size of chunk

byte 16 row 1

byte 16 row 2

byte 16 row 3...

******** Sample data chunk *********

char 4 "8SMP" ;8 - bit SaMPle

long 4 Size of chunk

byte ? Sampledata

1.57 Appendix B

APPENDIX B HISTORY:

Version Change

2.0 * Everything

2.01 * Fixed some bugs:

* The Load Module Menu choise made the computer crash if you

didn't have Magic Menu installed.

* The Editskip keyboard shortcut did more than it should.

2.011 * Eine kleine bug in the Synth fixed.

* Op & Exit Echo does now work.

* Warns if 'diskfont.library' isn't found.

(About three lines in the source changed.)

2.02 * Added "Pattern" to samplelist.

2.021 * Fixed OS3.0 screenbar bug.

2.03 * Made the menus look good on 3.0's. Unfortunately, they

look like hell when using Magic Menu.

* Noise in the synth addded.

* The vibrato depth is now halved when loading/saving NT modules.

* The graphics task doesn't freeze when closing the spect or scope window

anymore (it used do to so sometimes).

* The CIA / VBlank timing status is now saved in the pref file.

* The keyboard buffer is cleared when playing sounds in the sample editor.

* "Play"-time added.

* The frequency of the vblank interrupt is now checked. The samplepointers

will be in the correct position all the time.

* The envelopes in the synth are now save- and loadable.

* Fixed a save NT module bug.