

PstTracker

COLLABORATORS

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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

PstTracker

1.1 Welcome To the PstTracker Help Guide

Table of contents:

- PstTracker
- General
- MainScreen
- DiskOperations
- PresetList
- PresetEd
- Setup 1
- Sampler
- Midi
- Edit Operations
- Setup 2
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- Spectrum Analyzer

1.2 psttracker

PSTTracker V1.11 Nov/Dec '92

(C)1992 PARASITE (tm)

This program is Public Domain

This code is based on ProTracker 1.2

Originally by Lars "ZAP" Hamre

PARASITE Version By:

John "SHAYERA" Hinge in 92

This is a preview version. real PSTT is being developed while you read this
PSTT will be coded in c and will take full use of the amigas multitasking
and screen capabilities. ...SHAYERA..

Some technical info:

Sourcecode : 331k / 19324 lines

Main Program : 151k

GFX data : 50k (packed)
Worktime : 4 Weeks (2 Times)
ASM time : about 1.35 minutes
Objects : 3 files (Startup,GFX+Code)

This program has been a pain in the .. I experienced a harddisk crash while i was just finishing it off.. So i had to start all over again.
But here it is. SHAYERA...

Improvements/Changes :

-Distortion function !!!

-Now saves FX-macros in \${"configfile" link Setup11} !!!

-No Midi Routines (They didn't work !!)

-New and improved VU-Meters.....

-Solo Function For audio channels

-Module Save Bug From V1.04 Removed

-Sampler is Back !! i found the bug..

- Now uses a 'Real' Detach Module to ensure 'nice' autodetaching from the current CLI

To contact SHAYERA of PARASITE :

Write to :

John Hinge
Gudrunsvej 68,IIIth. V1
DK-8220 Brabrand.
Denmark.

thanx goes out to the following :::
Quackbuster,Jones,Estrup of ..Static Bytes..

And to Shadowmind of Humane.:

Thanx for the Help (At Samsoe)... To bad that the Bug was in another part of the code, as your fixe made a module 30 bytes longer for each unused sample slot in the song, and ensured that the module could only be played in PSTT :^(

Important note :::::

Due to the way i am currently doing the sampler functions, you must observe the following :

Please wait until any diskactivity is completely stopped before you activate the sampling functions

Failure to do so may result in both loss of diskdata and corrupt sampledata.
..... This is important..

1.3 mainscreen

MAINSCREEN

PLAY

Will play the song from the current position in the song. The pointer turns yellow, just to show you what's going on.

PATTERN

Will play the current pattern which is shown at the bottom of the screen. The pointer turns yellow here as well. Holding down the right button while pressing play or pattern will play from the current patternposition.

EDIT

Will put you in edit mode. The pointer turns blue, and you can enter notes and numbers from the keyboard. Use the arrowkeys to move up/down and left/right in the pattern. Entering a note or a number will cause the pattern to jump one or more slots down.

RECORD

Will put you in edit mode, but also play the current pattern or song. You can select this in the Edit Options menu. While the pattern or song is playing, you can type in notes and numbers from the keyboard, and they will appear in the pattern as it scrolls. The notes and numbers will also be quantized to the nearest slot, so that keeping a steady rhythm is no problem. The pointer will turn blue here as well as in the the normal edit mode.

STOP

Will stop playing of songs, patterns & recording, and will turn editmode off.

CLEAR

Will first ask you what you want to clear, with the Clear Requester. You can clear either all, song or samples.

EDIT OP.

Will exchange the Spectrum Analyzer with the Edit Menu(s). Pressing more than one time will browse through the edit op. screens.

DISK OP.

Will go to the Disk operations.

PLST

Will go to the PresetList screen.

PSET-ED

Will go to the Preset editor.

Setup

Will go to the Setup Screen.

Sampler

Will go to the Sampler screen.

The small gadgets labeled

1, 2, 3 and 4

Represent the audiochannels of your amiga. When lit, that channel is on. When not lit, the channel is muted and the notes in that track will not be played.

You can also use ctrl-a to toggle an audiochannel, and ctrl-q to unmute all channels. Ctrl+shift-a will solo the current channel, or use Right MB + Left MB on gadget to solo channel

Tempo

The tempo gadget on the status bar is for setting the CIA speed, if CIA timing is used. The gadget will be updated every time you set the speed using the F command (if CIA that is).

1.4 diskop

DISK OP.

Delete Song/Module/Sample changed to one gadget: Delete file.

Directories shown/Parent gadget.

Path indicator arrow. Click to change paths without reading dir.

Clicking on "UPD" will show you free diskpace also without reading dir.

Dir-browse button and lots more...

Path

The paths for songs, modules and samples can now be changed, and they can be up to 31 characters long. To change path, click on load song/module/sample or use the arrow indicating what path you're at.

UPD (Diskspace)

Free diskpace can be shown in hex or decimal. Select this on the setupscreen. Click on "UPD" to get free diskpace without rereading the dir.

Format Disk~##

Will format a disk in df0: (Hopefully still bug-free...)

Rename file

Will dir the current directory.

Select a filename, and you will be able to edit the name.

Delete file

Will dir the current directory.

Select a file, and it will be deleted from the disk.

Pack

When on, PSTTracker will pack songs before saving
(Modules can not be packed in this version, sorry!).

Load song

Will dir the songs path. Select a song, and it will be loaded and

decrunched if crunched.

Save song

Will pack the song if pack is on, then save it to the current songs path.
Remember to enter a name for your song, otherwise Pstt will not save!

Load module

Will dir the modules path. Select a module, and it will be loaded.

Save module

Will save the module to the current modules path.
Modules can be saved without a name, since they always begin with "Mod.".

Load sample

Will dir the sample path. Select a sample, and it will be loaded to the current sample. Iff headers will be chopped off and loops loaded, if any.

Save Sample

Will save the current sample as RAW or IFF.
Select this in the "Save" gadget to the right of "Load Sample".
IFF loops will be saved too.

Dir-Browse button

By pressing this button you can browse through various preset paths, so that you won't have to enter them over and over again.

AutoDir -

If you set the autodir toggle on the {"setup" link Setup1} screen to on, PSTTracker will automatically dir the current path when you enter the disk op. screen.

AutoExit -

When this toggle is on PSTTracker will exit from disk op.
when loading a song or a module.

Parent-dir Gadget

By pressing the "p" button you activate the parent dir function.
PSTT will try to move one step up in the directory chain if possible..

Note :: If you type a name for a Disk or a path that does not exist you will get a requester. Sometimes this will Make Pstt go dead.
This WILL be fixed in the forthcoming .REAL. version of the Tracker

1.5 presetlist

PLST

The PLST is fairly simple to use. Listed here are all the samples in your Presetlist and their lengths. Just click on a name, and PSTTracker will ask for a disk called ST-01 through to ST-FF. Insert it, and the chosen sample will be loaded to the current sample displayed at the left of the screen. Use the up/down arrow keys to move up and down in the PresetList. If you press the right mousebutton, the PLST will move 10 presets at a time. At the top the PLST shows the total number of samples

from the selected sounddisks.

There are a few PLST gadgets:

CLEAR

Will clear all the sounddisk names you have entered, and display the whole PresetList.

MOUNTL(ist)

Will search your drives for disks called ST-**, and put the names into the ST-__ gadgets. ST-00 will not be mounted.

ST-__

There are three ST-__ gadgets where you can enter the numbers of the sounddisks you want to display in the PLST. Only the presets from the selected sounddisks will be shown. If you clear all gadgets (by pressing return or right mousebutton), or press "Clear", the PLST will revert to show all presets.

1.6 preseted

PRESET ED

The PSTTracker's preset-editor is an enhanced version of the original v2.5 editor. The screen has been cleaned up, and redrawn to match the plst.

You can now save the finetune value in the presetlist instead of volume.

The preset editor is used for sorting and catalogueing your samples. All samples for use with PSTTracker should be on disks called "ST-01" to "ST-FF". When adding a disk to the presetlist, only these disks are recognized. Harddisk owners may want to add a directory. e.g. You've got a directory called "Supersamples", and you want to use the samples on pt... Simple. Assign "Supersamples" to ST-13 or whatever. In the box with "Disk:" and ST-__ in it, enter ST-13. Now enter "DHX:supersamples" in the path box and press "add path". The path will be added as ST-13 in your presetlist, so everytime you need a sample from ST-13, it will be loaded from "Supersamples" instead. Simple?

Editing

We must admit the editing is lousy, but you can't have everything! To edit a preset, simply click on it. Use the arrowkeys to move left/right.

When moving up and down in the presetlist, use the right mousebutton to speed it up a bit.

add path

Will add the current path to the presetlist. infos will not be added. Samplenames can only be 15 chars long.

Insert Preset

Will create a new preset. Enter the data for the sample, and it will be added to the presetlist.

```
## Delete Preset ##
Will delete the wanted preset from the presetlist.

## Delete Disk ##
Will delete the disknumber set in the "Disk:" box.

## PATH ##
This is where you enter the path to be added from. It can be up to 31
characters long (should be enough!?).

## Disk ##
This is the disk (or HD-dir) that's being added from (or deleted).

## Presets ##
This is the current number of presets in the presetlist.

## Clear PLST ##
Will clear all the presets.

## Load PLST ##
Will load the presetlist from a file called "PLST". This file should be
placed in the PTdir (See setup2).

## Save PLST ###
Will save the presetlist as a file called "PLST" to the current PTdir.

## Print PLST ##
Will print the presetlist to the
current print path, shown on the
setup-screen.

## PLST ##
Will go to the PLST-screen!

...and in case you were too stupid to
understand, PLST is a shortform for
"presetlist"!
```

1.7 sampler

Sampler -----

As you know the sampler had disappeared in version 1.04 of pstt.
It is know back as i found the bug that made it go dead (i hope)..

It's very fast, much faster than Audiomaster, and the editing is
much simpler.

We also included a resampling option which we hope you'll find useful.

Editing -----

When editing a sample, use to mouse to set the cursorline and to mark ranges.

```
## Waveform ##
Will play the full sample with loops.

## Display ##
Will play the part of the sample being shown on screen.

## Range ##
Will play the marked range.

## Stop ##
Will stop all playing of samples.

## Show range ##
Will magnify the current range and display it.

## Show all ##
Will display the whole sample.

## Beg ##
Will put the cursorline at the beginning of the sample.

## End ##
Will put the cursorline at the end of the sample.

## Swap buff(er) ##
The swap the current sample with the copy-buffer.

## Zoom out ##
Will show double the range you are displaying.

## Range all ##
Will range the part of the sample being displayed on screen.

## Cut ##
Will cut away the part of the sample that's marked.

## Copy ##
Will copy the marked range to the copy-buffer.

## Paste ##
Will paste the copy-buffer into the current sample.

The volume box
-----
The volume box is a bit like Audiomaster's, only better.

Set the "from" and "to" volume percentages by using the sliders,
or just type in any number you please (from 0 to 200) in the
percentage boxes to the right.

## Normalize ##
Will find the highest volume rate possible (without clipping).

## Cancel~##
Will exit the volume box.

## \ ##
```

Will set the percentages 100%-0%

/ ##
Will set the percentages 0%-100%

- ##
Will set the percentages 100%-100%

Ramp ##
Will ramp (calculate) the volume!

Tunetone ##
Will create a sinus sound, which you can tune your samples after.
See setup 2 help for details.

Sample

This will display the monitor.. Press rmb to sample or lmb to quit.

Note ##
This is the note to sample on. Range is C-1 to B-3.

Resample ##
The resampling option is much easier to use than the one in Audiomaster.
Here's a step-by-step explanation:

1. Turn on the tuning tone.
2. Use the keyboard to find what note it is. Use finetune if needed.
3. Enter the note in the "Note:" box to the right.
4. Press resample!

Note ##
This is what note to resample to.

Disp(lay) ##
This is the length of the part of the sample being shown on screen.

Loop on/off ##
This is for turning loops on/off without having to fiddle with the repeat and replen gadgets.

Exit ##
Exits the sampler screen.

1.8 setup1

SETUP -----

The setup screens were provided so PSTT users could set up their own personal environment. We hope we have satisfied most of you. You've got 7 on/off toggles, a split keyboard editor, a color palette and lots more. Choose what you want, and use "Save Config" to save your environment. On the next screen is a list of what will be saved in the config file. Click button "2" to enter setup screen 2, with lots of new features!

This will be saved in the config file:

Songs/Modules/Samples and Print paths, Split Keyboard data, Accidental,
MultiKey Channeltable, Colors, Keyrepeat, the 7 on/off toggles,
the 8 external dos commands and the effect macros + everything in setup 2.

You can have up to 256 different config files. They will be saved
as "pt.config-00", "pt.config-01" and so on. Set the confignumber
in the "cnfig" box.

Load config ##
Will load the selected config file.

Save config ##
Will save the selected config file.

Reset All ##
Will set the original PT defaults and colors.

Multi ##
This table is used with the multi key board option. The four numbers
repre sent what channel each channel will jump to next. 1-2, 2-3, 3-4
and so on.

The dot ##
The gadget with a dot and a textline can be used to execute dos commands.
Each of the 8 commands can be up to 31 letters long. Pressing the dot will
browse through the commands. Holding the right button and pressing it will
execute the command. Note that under KickStart 1.2/1.3 PT needs the command
"run" to execute the other commands. This is because of commodore's stupid
programming of the dos library function "execute". Type "endcli" to go back
to PSTTracker.

The Color Palette ##
The color palette is simple to use. Just select a color, and use the R,
G and B sliders to set the color.

Undo ##
Will put back the latest change.

Cancel ##
Will set the config colors.

Def(ault) ##
Will set the original ST colors.

Split ##
You can set 4 splits on the keyboard, each with it's own sample, splitpoint
and transpose. Just type in a sample number and select the key to split
at by pressing the appropriate one. The transpose note for each split is
the first note in that split-range. Notes below the first split will
be played with the current sample. Split is great for recording drums,
or for playing untuned samples in tune (use together with finetune).

Clear ## will clear the splits.

```
## KeyRep(eat) ##
The first number is the keyrepeat delay, and the second is the speed.

## Accidental ##
Simple enough, accidental allows you to select sharp (#) or flat (b) notes.
This will not be saved with the song, but can be saved in the Config!

## Print Song ##
Will print the song to the path shown below the "Print Song" gadget.
The print path can be 31 chars long.

## Split on/off ##
Toggles between normal and split keyboard.

## Filter on/off ##
Toggles the audiofilter / PowerLED. (Not available on all amigas)

## Trans(pose)del(ete) on/off ##
When on, notes transposed out of range will be deleted.

## ShowDec(imal) ##
When on, Freemem, Tunemem, and filelengths will be shown in decimal.

## Autodir on/off ##
When on, PSTTracker dirs the current directory path automatically.

## AutoExit on/off ##
When on, PSTTracker will automatically exit from the Disk Screen when
loading a song or module.

## Mod. only on/off ##
When on, PSTTracker will only show modules beginning with "mod.".

!!! <Midi Toggle Removed> !!!
```

1.9 setup2

Setup 2 -----

Setup 2 is basically full of the things we couldn't fit into Setup 1 in Protracker 1.0 + a few things people thought we should include. Well, hope you're satisfied with the result guys... Click on "1" to go back to good ol' setup 1...

```
## Timing ##
```

We included this so that american users also could enjoy PSTTracker, and wouldn't have to use sonix or any other terrible music program... You can choose between CIA or Vblank timing. Vblank is the timing-method soundtrackers have been using since the dawn of time, while CIA is a much better and accurate timing with the tempo measured in beats per minute. Using Vblank on NTSC amigas will cause the song to play 20% faster. With CIA, there's no difference.

```
## Tempo ##
```

This is where you set your default CIA timing tempo. Range: 32-255.

```
## Speed ##
This is where you set your default Vblank timing speed. Range: 01-FF.

## Copper Editor ##
The copper editor is for altering the colors of the VU-meters and the
spectrum analyzer to your own liking. Select a color by clicking somewhere
within the coppered stripe.
Now use the R, G and B sliders to alter the color.

## Spread ##
Will create an even gradient between the current color and the one you
click on next.

## arrows ##
Will rotate the whole copper stripe in the Y-axis (up/down).

Undo, cancel and def(ault) will work just like in the palette in setup 1.

## Mods ##
This is where you set your default modules path.

## Songs ##
This is where you set your default songs path.

## Sampl(es) ##
This is where you set your default sample path.

## PTdir ##
This is the path for all the files (We use most of the old PT files..)

## Max PLST ##
This is the maximum number of presets in your presetlist.

## DMA wait ##
Use this on fast amigas to slow down the DMA enough to not miss any notes.

## Tuning tone ##
The tuning tone is for use with the sample editor. The note is what note
to play the tuning tone at, and the number is the volume.

!!! <Salvage function Removed> !!!

## <- Default ##
Will put back the default for everything in the middle column.

## Override ##
When on, PSTT will ignore any paths or disknames when loading a song
or module. All the samples will be loaded from the current sample path.

## Nosamples ##
When on, PSTT won't load the samples when loading a song or module.

## BlankZero ##
When on, PSTT won't show the first zero in the samplenummer, as on NT1.2.

## Show dirs ##
```

When on, directories will be shown in Disk Op.

Show Publ(ic)

When on, PSTT will show all free memory, not just chip-mem.

Cut to buff(er)

When on, all samples cut in the sample editor will to put in the copy-buffer.

Load loop

When on, PSTT will load loops from IFF-samples.

Slow Mode

When on, text editing, gadget-repeats, etc. will go much slower. Use this if you have a 25 MHz A3000 or any other fast computer. We will try to do an automatic speed check in the next version.

1.10 midi

MIDI

All the MIDI stuff from ProTracker has been removed.. As it turned out that they didn't work according to NOXIOUS. Therefor they willmost likely be replaced with some other new stuff...

Feel free to send input on this.. (New working MIDI routines might do..)

Sorry.. But that is just the way that life kicks you sometimes..

SHAYERA of PARASITE 1992

1.11 edit

EDIT OP.

The edit op. screens were just a handy way for us to implement all the new functions we had thought of. There are three screens, and you can browse through them by pressing the edit op. gadget more than once, or select one by clicking on the numbers 1-3.

To exit edit op., click on the gadget labeled "E" or press ESC.

Edit op. Screen 1:

Transposing

What is transposing ?

Transposing lets you shift the pitch of the notes up or down.

E.g. Change a C-3 to a C#3.

In comparison to other trackers, PSTTracker lets you transpose in just about every way you can imagine. You can transpose either the current sample or all the samples in a track or pattern.

To the right of the title bar is a small box with the letter "S" or "A".

S - Only the current sample will be transposed.

A - All the samples from \$00-\$1F will be transposed.

To toggle between the two, click on the edit op. title bar.

If the setup toggle "transdel" is on, all the notes transposed out of range (C-1 to B-3) will be deleted. If not, they will not be transposed.

Edit op. screen 2: (Record)

Record

Patt - Record current pattern only.

Song - When recording, PSTT will move through the patterns in the song, just like normal play.

Quantize

Will move the notes you record to every n'th slot. Entering 00 will turn off the quantizing, and the notes you play will always be inserted at the pattern position you are at. Entering 01 will quantize the notes to the nearest slot according to the speed. i.e. if you play a note after the first half has been played, it will be quantized to the slot below. Entering a value like 8 will quantize to every 8th note, and so on. Got that?

Metro(nome)

The first number is the speed of the metronome, and the second is the channel to play it on. The Sample used for metronomes is always sample \$1F. Load your own favourite metro nome sample. The metronome will always be played at C-3, but you can still change the volume and loop values. To turn off the metronome, just set the speed or channel to 00.

Multi

When on, PSTT will jump to another channel after you play a note on the keyboard. This makes it possible to play two or more notes at the same time (very useful with midi). On the setup screen you can choose what channel to jump to after playing a note.

Edit Op. screen 2: (Samples)

To the right of the title bar is a small box with the letter "T", "P" or "S".

T - Copy & Exchange apply to current track only.

P - Copy & Exchange will affect the whole pattern.

S - Copy & Exchange will apply to the real samples in memory.

To toggle between the two, click on the edit op. title bar.

Delete

Will delete all notes with the current sample in current track or whole pattern.

Kill

Will kill the current sample. That is, remove it from memory and

reset all sample settings. It will not be deleted from the track or pattern. You can also use the period (.) key on the numeric keyboard to invoke this function.

EXCHGE (Exchange)

Will exchange the samplenum shown in the "from" gadget with the samplenum in the "to" gadget and vice versa. "T" or "P" selects track or pattern. "S" exchanges the samples.

MOVE

Will move the samplenum shown in the "from" gadget to the samplenum in the "to" gadget.

Edit Op. screen 3: (Sample Editor)

To the right of the title bar is a small box with the letter "H" or "C".

H - Will halve the volume when mixing and echoing to avoid clipping.

C - Will not halve the volume. The sample may be clipped.

To toggle between the two, click on the edit op. title bar.

Mix

Will mix one sample with another. PSTT asks you which two samples to be mixed, and where to put the result.

Holding the right button and pressing mix will mix the current sample with itself. You can offset the sample by setting a position in the "pos" gadg. If you set "mod" to a non-zero value, the sample will also be modulated.

Echo

Will create a echo effect on the current sample. Use "pos" to set the delay time of the echo. If you want more room to echo in, just turn up the length of the sample.

Boost

Will turn up the treble of the sample. Use this on hi-hats and snares!

Filter

Will Delta-filter the sample. Use this on noisy basses.

X-Fade

Will crossfade the sample (mix with itself, backwards). Handy for looping samples that are hard to loop.

Backwd (backwards)

Will turn the sample backwards!

Upsample

Will remove every second byte of the sample, halving the length and shifting the pitch one octave up.

Downsample

Will double every byte of the sample, doubling the length, and shifting the

pitch one octave down. If you downsample samples longer than \$7FFE, you will lose the end of them.

POS

This is just a offset in the sample, used for a lot of things.

MOD

This is used for modulation. Press "MOD" to modulate the current sample.

Cutbeg(inning)

Will chop the number of bytes set in the "pos" gadget off the beginning of the sample.

FU (Fade Up)

Will fade the volume from 0 to 100%. Use "Pos" to select where in the sample to fade up to.

FD (Fade Down)

Will fade the volume from 100 to 0%. Use "Pos" to select where in the sample to fade down from.

VOL

With this you can change the "real" volume of the sample. Just set a percentage and press "VOL".

Edit Op.3 is now intended to be used with the new sample-editor. If a range is marked, some of the functions apply to the range only. If there's no range marked, the functions will affect the whole sample. You may also set "POS" by clicking on the sample and setting the cursor-line.

1.12 fxcomms

EFFECT COMMANDS

Effect commands on PSTTracker should be compatible with all other trackers.

0 - None/Arpeggio	8 - * NOT USED *
1 - Portamento Up	9 - SampleOffset
2 - Portamento Down	A - VolumeSlide
3 - TonePortamento	B - PositionJump
4 - Vibrato	C - Set Volume
5 - ToneP + VolSlide	D - PatternBreak
6 - Vibra + VolSlide	E - Misc. Cmds
7 - Tremolo	F - Set Speed

E - COMMANDS

The E command has been altered to contain more commands than one.

E0- Filter On/Off	E8- * NOT USED *
E1- Fineslide Up	E9- Retrig Note
E2- Fineslide Down	EA- FineVol Up
E3- Glissando Control	EB- FineVol Down

E4- Vibrato Control	EC- NoteCut
E5- Set Finetune	ED- NoteDelay
E6- Patternloop	EE- PatternDelay
E7- Tremolo Control	EF- Invert Loop

Cmd 0. Arpeggio [Range:\$0-\$F/\$0-\$F]

Usage: \$0 + 1st halfnote add
 + 2nd halfnote add

Arpeggio is used to simulate chords. This is done by rapidly changing the pitch between 3(or 2) different notes. It sounds very noisy and grainy on most samples, but ok on monotone ones.

Example: C-300047 C-major chord:
 (C+E+G or C+4+7 halfnotes)
 C-300037 C-minor chord:
 (C+D#+G or C+3+7 halfnotes)

Cmd 1. Portamento up [Speed:\$00-\$FF]

Usage: \$1 + portamento speed
Portamento up will simply slide the sample pitch up. You can NOT slide higher than B-3! (Period 113)

Example: C-300103 1 is the command, 3 is the portamentospeed.
NOTE: The portamento will be called as many times as the speed of the song. This means that you'll sometimes have trouble sliding accurately. If you change the speed without changing the sliderates, it will sound bad...

Cmd 2. Portamento down [Speed:\$00-\$FF]

Usage: \$2 + portamento speed
Just like command 1, except that this one slides the pitch down instead. (Adds to the period).

You can NOT slide lower than C-1! (Period 856)

Example: C-300203 2 is the command, 3 is the portamentospeed.

Cmd 3. Tone-portamento [Speed:\$00-\$FF]

Usage: Dest-note + \$3 + slidespeed

This command will automatically slide from the old note to the new. You don't have to worry about which direction to slide, you need only set the slide speed. To keep on sliding, just select the command \$3 + 00.

Example: A-200000 First play a note.
 C-300305 C-3 is the note to slide to, 3 the command, 5 the speed.

Cmd 4. Vibrato [Rate:\$0-\$F,Dpth:\$0-\$F]

Usage: \$4 + vibratorate + vibratodepth

Example: C-300481 4 is the command, 8 is the speed of the vibrato,
 and 1 is the depth of the vibrato.

To keep on vibrating, just select the command \$4 + 00. To change the vibrato, you can alter the rate, depth or both. Use command E4- to change the vibrato-waveform.

Cmd 5. ToneP + Volsl [Spd:\$0-\$F/\$0-\$F]

Usage: \$5 + upspeed + downspeed

This command will continue the current toneportamento and slide the volume at the same time. Stolen from NT2.0.

Example: C-300503 3 is the speed to turn the volume down.

C-300540 4 is the speed to slide it up.

Cmd 6. Vibra + Volsl [Spd:\$0-\$F/\$0-\$F]

Usage: \$6 + upspeed + downspeed

This command will continue the current vibrato and slide the volume at the same time. Stolen from NT2.0.

Example: C-300605 5 is the speed to turn the volume down.

C-300640 4 is the speed to slide it up.

Cmd 7. Tremolo [Rate:\$0-\$F,Dpth:\$0-\$F]

Usage: \$7 + tremolorate + tremolodepth

Tremolo vibrates the volume.

Example: C-300794 7 is the command, 9 is the speed of the tremolo, and 4 is the depth of the tremolo.

To keep on tremoling, just select the command \$7 + 00. To change the tremolo, you can alter the rate, depth or both. Use command E7- to change the tremolo-waveform.

Cmd 9. Set SampleOffset [Offs:\$00-\$FF]

Usage: \$9 + Sampleoffset

This command will play from a chosen position in the sample, and not from the beginning. The two numbers equal the two first numbers in the length of the sample. Handy for speech samples.

Example: C-300923 Play sample from offset \$2300.

Cmd A. Volumeslide [Speed:\$0-\$F/\$0-\$F]

Usage: \$A + upspeed + downspeed

Example: C-300A05 5 is the speed to turn the volume down.

C-300A40 4 is the speed to slide it up.

NOTE: The slide will be called as many times as the speed of the song. The slower the song, the more the volume will be changed on each note.

Cmd B. Position-jump [Pos:\$00-\$7F]

Usage: \$B + position to continue at

Example: C-300B01 B is the command, 1 is the position to restart song at.

This command will also perform a pattern-break (see 2 pages below).

You can use this command instead of restart as on noisetracker, but you must enter the position in hex!

Cmd C. Set volume [Volume:\$00-\$40]

Usage: \$C + new volume

Well, this old familiar command will set the current volume to your own selected. The highest volume is \$40. All volumes are represented in hex. (Programmers do it in hex, you know!)

Example: C-300C10 C is the command, 10 is the volume (16 decimal).

Cmd D. Pattern-break [Pattern-pos:00-63, decimal]

Usage: \$D + pattern-position

This command just jumps to the next song-position, and continues play from the patternposition you specify.

Example: C-300D00 Jump to the next song-position and continue play from patternposition 00.

Or: C-300D32 Jump to the next song-position and continue play from patternposition 32 instead.

Cmd E0. Set filter [Range:\$0-\$1]

Usage: \$E0 + filter-status

This command jerks around with the sound-filter on most A500 + A2000. All other Amiga-users should keep out of playing around with it. (though it looks funny, it sounds like shit)

Example: C-300E01 disconnects filter (turns power LED off)

C-300E00 connects filter (turns power LED on)

Cmd E1. Fineslide up [Range:\$0-\$F]

Usage: \$E1 + value

This command works just like the normal portamento up, except that it only slides up once. It does not continue sliding during the length of the note.

Example: C-300E11 Slide up 1 at the beginning of the note.
(Great for creating chorus effects)

Cmd E2. Fineslide down [Range:\$0-\$F]

Usage: \$E2 + value

This command works just like the normal portamento down, except that it only slides down once. It does not continue sliding during the length of the note.

Example: C-300E26 Slide up 6 at the beginning of the note.

Cmd E3. Glissando Ctrl [Range:\$0-\$1]

Usage: \$E3 + Glissando-Status

Glissando must be used with the toneportamento command. When glissando is activated, toneportamento will slide a halfnote at a time, instead of a straight slide.

Example: C-300E31 Turn Glissando on.

C-300E30 Turn Glissando off.

Cmd E4. Set vibrato waveform [Range:\$0-\$3]

Usage: \$E4 + vibrato-waveform

Example: C-300E40 Set sine(default)
E44 Don't retrig WF
C-300E41 Set Ramp Down
E45 Don't retrig WF
C-300E42 Set Squarewave
E46 Don't retrig WF
C-300E43 Set Random
E47 Don't retrig WF

Cmd E5. Set finetune [Range:\$0-\$F]

Usage: \$E5 + finetune-value

Example: C-300E51 Set finetune to 1.

Use these tables to figure out the finetune-value.

Finetune:	+7	+6	+5	+4	+3	+2	+1	0
Value:	7	6	5	4	3	2	1	0

Finetune:	-1	-2	-3	-4	-5	-6	-7	-8
Value:	F	E	D	C	B	A	9	8

Cmd E6. PatternLoop [Loops:\$0-\$F]

Usage: \$E6 + number of loops

This command will loop a part of a pattern.

Example: C-300E60 Set loopstart.

C-300E63 Jump to loop 3 times before playing on.

Cmd E7. Set tremolo waveform [Range:\$0-\$3]

Usage: \$E7 + tremolo-waveform

Example: C-300E70 Set sine(default)

E74 Don't retrig WF

C-300E71 Set Ramp Down

E75 Don't retrig WF

C-300E72 Set Squarewave

E76 Don't retrig WF

C-300E73 Set Random

E77 Don't retrig WF

<-- EDIT OP. UP/DOWN KEYBOARD -->

^C8:A1,C7,C9,D1

Cmd E9. Retrigger note [Value:\$0-\$F]

Usage: \$E9 + Tick to Retrigger note at.

This command will retrigger the same note before playing the next. Where to retrigger depends on the speed of the song. If you retrigger with 1 in speed 6 that note will be triggered 6 times in one note slot. Retrigger on hi-hats!

Example: C-300F06 Set speed to 6.

C-300E93 Retrigger at tick 3 out of 6.

Cmd EA. FineVolsl up [Range:\$0-\$F]

Usage: \$EA + value

This command works just like the normal volumeslide up, except that it only slides up once. It does not continue sliding during the length of the note.

Example: C-300EA3 Slide volume up 1 at the beginning of the note.

Cmd EB. FineVolsl down [Range:\$0-\$F]

Usage: \$EB + value

This command works just like the normal volumeslide down, except that it only slides down once. It does not continue sliding during the length of the note.

Example: C-300EB6 Slide volume down 6 at the beginning of the note.

Cmd EC. Cut note [Value:\$0-\$F]

Usage: \$EC + Tick to Cut note at.

This command will cut the note at the selected tick, creating extremely short notes.

Example: C-300F06 Set speed to 6.
C-300EC3 Cut at tick 3 out of 6.

Note that the note is not really cut, the volume is just turned down.

Cmd ED. NoteDelay [Value:\$0-\$F]

Usage: \$ED + ticks to delay note.

This command will delay the note to the selected tick.

Example: C-300F06 Set speed to 6.
C-300ED3 Play note at tick 3 out of 6.

Cmd EE. PatternDelay [Notes:\$0-\$F]

Usage: \$EE + notes to delay pattern.

This command will delay the pattern the selected numbers of notes.

Example: C-300EE8 Delay pattern 8 notes before playing on.

All other effects are still active when the pattern is being delayed.

Cmd EF. Invert Loop [Speed:\$0-\$F]

Usage: \$EF + Invertspeed

This command will need a short loop (\$10,20,40,80 etc. bytes) to work. It will invert the loop byte by byte. Sounds better than funkrepeat...

Example: C-300EF8 Set invspeed to 8.

To turn off the inverting, set invspeed to 0, or press ctrl + Z.

Cmd F. Set speed [Speed:\$00-\$FF]

Usage: \$F + speed

This command will set the speed of the song.

Vblank: Range 01-FF - Normal timing

CIA: Range 01-1F - Set vblank speeds with CIA timing.

CIA: Range 20-FF - Set BPM speeds, range 32-255.

Both: Range 00 - STOP song.

1.13 keyboard

KEYBOARD

The keymap on PSTTracker is a standard us keymap. The font has been

enhanced and redrawn a little, so you now have a lot more special characters than before. Remember to always use the left shift and alt, as the right ones are used for other things.

High notekeys: 2 3 5 6 7 9 0 =
 Q W E R T Y U I O P []

Low notekeys: S D G H J L ;
 Z X C V B N M , . /

F1 - Choose lo octave(From C-1 to G-3)

F2 - Choose hi octave(From C-2 to B-3)

shft+F3 - Cut track to buffer
shft+F4 - Copy track to buffer
shft+F5 - Paste track-buffer to track

alt+F3 - Cut whole pattern to buffer
alt+F4 - Copy whole pattern to buffer
alt+F5 - Paste patt-buffer to pattern

ctrl+F3 - Cut commands to buffer
ctrl+F4 - Copy commands to buffer
ctrl+F5 - Paste cmd-buffer to track

F6 - Go to patternposition 0
F7 - Go to patternposition 16
F8 - Go to patternposition 32
F9 - Go to patternposition 48
F10- Go to patternposition 63

shft+F6-F10 - Store current patternposition on selected F-key
alt+F6-F10 - Play pattern from the stored patternposition
ctrl+F6-F10 - Record from the stored patternposition

Esc - Exit DiskOp/EditOp/PLST/PsetEd/Setup and MIDI screens

shft+Return - Insert blank note at cursorposition and move the others down.
Notes beyond patternposition 63 will be lost!

shft+Bckspce - Delete note above cursorposition and move the others up.
You can NOT do this if you're at patternposition 0!

alt+Return - As above, but with all 4 tracks

alt+Backspace - As above, but with all 4 tracks

ctrl+Return - Push cmds one down

ctrl+Backspace - Drag cmds one up

ctrl+0-9 - Select how many slots PT will jump down each time you insert
a note (this is only in Edit-mode)

alt+cursor right - patternnnumber up

alt+cursor left - patternnnumber down

shft+cursor right - song-position up

shft+cursor left - song-position down

BackwardsSingleQuote (The key over TAB, you know?) - Go to CLI

Help - Go to help or plst screen

shft+Help - Toggle between help or plst on help key

Space - Toggle between Stop/Edit-mode

< (beside Z) - Kill DMA & Volumes to 0

right Amiga - Play pattern

right Alt - Play Song

right Shift - Record

Caps Lock - Toggle Keyrepeat on/off

Del - Delete note under cursor

alt+Del - Delete command only

shft+Del - Delete note and command

On Numeric pad:

0 - Select Sample \$0

1st row - Select Sample \$1-\$4

2nd row - Select Sample \$5-\$8

3rd row - Select Sample \$9-\$c

4th row - Select Sample \$d-\$f

Just Enter - Select Sample \$10

Holding Enter + the other keys select sample \$11-\$1f

Period (.) - Kill current sample

Left Amiga (Plus keys below) -

Transposing like in Edit Op. Screen 1

Sample/track	Sample/pattern

1 - Note Up	2 - Note Up
Q - Note Down	W - Note Down
A - Octave Up	S - Octave Up
Z - Octave Down	X - Octave Down
All/track	All/pattern

3 - Note Up	4 - Note Up
E - Note Down	R - Note Down
D - Octave Up	F - Octave Up
C - Octave Down	V - Octave Down

Tab - Move cursor to next track
Shift+Tab - Move cursor to prev track

Ctrl+a - Toggle channel on/off
Ctrl+b - Mark block
Ctrl+c - Copy block to buffer
Ctrl+d - Delete block, drag notes up
Ctrl+e - expand track
Ctrl+f - toggle filter on/off
Ctrl+g - Boost all samples
Ctrl+h - Transpose block up
Ctrl+i - Insert block, push notes down
Ctrl+j - Join-paste block
Ctrl+k - Kill to end of track
Ctrl+l - Transpose block down
Ctrl+m - Toggle multikeyboard on/off
Ctrl+n - Re-mark last block
Ctrl+o - Contract track
Ctrl+p - Paste block
Ctrl+q - Unmute all channels
Ctrl+r - Restore F6-F10 positions
Ctrl+s - Toggle split keyboard on/off
Ctrl+t - swap tracks
Ctrl+u - undo last change
Ctrl+v - Filter all samples
Ctrl+w - Polyphonize block
Ctrl+x - Cut block to buffer
Ctrl+y - Backwards block
Ctrl+z - Restore Effects

shft+0-9 - Store current command on selected key
alt+0-9 - Insert command in current track

alt+"\" - Copy command above cursor to current patternposition.

alt+"=" - Copy command above cursor to current patternposition
and add one to the value.

alt+"-" - Copy command above cursor to current patternposition
and subtract one from the value.

alt+a - Monitor/Start sampling
alt+b - Boost sample
alt+c - Toggle channel 3
alt+d - Go to Disk Op.
alt+e - Go to Edit Op.
alt+f - Filter sample
alt+i - Autoinsert volume
alt+k - Delete current sample/track
alt+q - Quit PSTTracker
alt+r - Resample
alt+s - Go to Sampler screen.
alt+t - Tuning Tone
alt+v - Toggle channel 4
alt+x - Toggle channel 2
alt+y -

alt+z - Toggle channel 1

F3 - Cut (sample)

F4 - Copy (sample)

F5 - Paste (sample)

\ - Toggle keypad mode (dots!)

Return - Step one note forward

Backspc- Step one note backward

Alt+any key on keypad - tune drumpad

ctrl+arrows left/rite - Sample up/down

1.14 general

GENERAL INFO.

Contents:

Making Music

Patterns

Tracks

Positions

FineTune

SampleNr

Sample Length

Volume

Repeat

Repeat Length

Pattern Number

The Are You Sure Requester

The Clear Requester

The Load (Sample) Gadget

TextLines and Input Routine

Tips & Tricks

The Pointer Colours

DrumPad

1.15 makingmusic

Making Music

Any piece of music written with PSTTracker is built up from patterns. Each pattern is built up from four tracks, one for each of the amiga's audiochannels.

1.16 patterns

A pattern is 64 lines long. The magnified line is always the one you edit. If you need shorter patterns, use the patternbreak effect command.

1.17 tracks

A track is built up like this:

```

    32  C-3 01 C20
    /    \_ / || \_ /
    /      /  |    \
Pos Note Sample Effect cmd.
```

The C-3 is the note being played at patternposition 32. 01 is the sample-number, and the three last digits are the effect command, in this case, set volume to \$20 (C-Command, 20-Value).

1.18 positions

PSTTracker holds a table with info about the sequence in which the patterns will be played. With the "Pos" gadget you determine your position in the table. With "Pattern" you define what pattern to play at that position. "Length" defines the total size of the table. The full sequence of Patterns is the Song. A song is built up from up to 64 different patterns, each being played at up to 128 different positions.

The small gadgets labeled "I" and "D" are Insert and Delete. With them you can Insert or Delete a position from your song. The length of your song will be adjusted automatically. Remember that the length of your song always must be one more than the last position, since the first position is 0.

Holding down the right button when pressing the Pos, Pattern and Length gadgets will speed them up a bit.

1.19 finetune

Finetune

This is a goodie. Tune your untuned samples to match the others. Right button will set finetune to zero.

0 436.4 hz	-1 432.1 hz
1 439.0 hz	-2 429.6 hz
2 441.6 hz	-3 426.3 hz
3 445.1 hz	-4 423.1 hz
4 447.8 hz	-5 419.9 hz
5 451.5 hz	-6 416.7 hz
6 455.2 hz	-7 414.4 hz
7 457.0 hz	-8 412.0 hz

1.20 sample

Sample

Clicking on the sample up/down gadgets will flicker through the samples. You can use up to 31, or hex \$1F samples in a song.

Sample zero function

Pressing both mousebuttons at the same time will set the samplenmber to zero. You can then record the pattern with sample 0 to prevent PSTTracker from setting the volume each time you play a new note.

1.21 samplelength

Length

The Length gadgets are simply used for setting the length of the sample. A sample can be up to 64k, or \$fffe long. You can add workspace behind the sample by increasing the length and letting go of the button. PT will ask if you are sure?, and if you are, allocate more memory for the sample.

1.22 volume

Volume

Use this to set the volume the current sample will be played with.

1.23 repeat

Repeat

Here you set the start of the sample loop.

1.24 replen

Replen

Here you set the length of the sample loop.

Pressing both the left and right button on the sample-gadgets will speed them up a bit.

1.25 patternnumber

The PatternNumber Gadget

To the middle left of the screen is a box with a number in it. The number is the current pattern number. Click on it to type in a new number. When in type-in mode, use return, ESC or right mousebutton to exit. This should also work on most other such gadgets.

1.26 yesnorequester

The "Are you sure ?" requester

The Tracker will show this when you MUST Confirm an action...
In addition to the gadgets, you can use "Y" for Yes and "N" or ESC for No.

1.27 clearrequester

The Clear requester

The Tracker will show you some options for Clearing:

In addition to the gadgets you can use
"A" for All, "O" for Song, "S" for
samples and "C" or ESC for Cancel.

1.28 loadsamplegadget

The Load (sample) gadget

This gadget will simply try to load the current samplename. Use this when you've fucked up in the sample editor, and have destroyed a sample.

1.29 textlines

The text-input routine

Now this is really simple. Clicking on a textline will enable you to edit it. Some text lines are longer than they seem, so use the arrowkeys to scroll back and forth in the text. The text input mode is just like an ordinary text editor. You can use backspace, delete, space and such. In text-input mode you can also use the numeric pad for entering numbers. Pressing the right mousebutton will clear the text line and exit the editing. Use ESC or return to just exit.

1.30 tipsandtricks

Tips 'n tricks

When inserting, pasting or joining, hold down shift to keep the cursor from jumping to the end of the block. e.g. shft+ctrl+P

Holding shift while pressing ctrl+K (kill to end of track) will kill to start of track instead.

Use Esc or right mousebutton to exit form a lot of things.

Effect tips

You can set the volume without playing a note. e.g. ---01000

This will set the volume for sample 1 without triggering the note.

Or try triggering the sample and sliding the volume down. e.g. C-301A08

---01A08

---01A08

This will create a strange arpeggiato effect, like on "Cream of the earth" by Romeo Knight / RSI.

1.31 pointercolours

Pointer Colors

Gray	- Nothin's happening.
Yellow	- Playing song / pattern.
Green	- Disk action.
Blue	- Edit / record.
Magenta	- Waiting for something (text or number).
Cyan	- Select entry or delete.
Red	- Something went wrong.

1.32 drumpad

Drumpad

PSTTracker 1.0 features a drumpad as in Noisetracker 2.0 and 2.1. Use \ instead of . to toggle modes. One or more dots will appear to the right of the freemem display.

No dots: Normal keypad.

1 dot: Drumpad.

2 dots: Drumpad - Edit/Rec possible.

Use Alt + keypad key to set note.

1.33 spectrumalyzer

The Spectrum Analyzer shows you a spectrum of the music playing and attempts to give you a view of the general music. It works just like a graphical equalizer. If you press in the Titlebar you can exchange it for the QuadraScope... This nifty piece of programming shows a sample of what is playing in each of the four audiochannels. This can often give a more precise look at what is going on.

1.34 distortion

The Distortion function is (for the moment) an experimental sample effect. It has not yet it's own gadgets but only a keyboard activation. use Alt+M or Alt+O to distort the current sample. Used with the SampleScreen you can work on ranges. I would like some feedback on this function (How to improve it ??) But i hope you can use it.