

# **ProTracker3.52**

T.B

**COLLABORATORS**

	<i>TITLE :</i> ProTracker3.52		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	T.B	February 12, 2023	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>ProTracker3.52</b>	<b>1</b>
1.1	Protracker V3.52 Quickguide . . . . .	1
1.2	Copyrights . . . . .	1
1.3	Authors . . . . .	2
1.4	Prologue . . . . .	2
1.5	Userinfo . . . . .	5
1.6	Epilogue . . . . .	5
1.7	History . . . . .	6
1.8	Credits . . . . .	12
1.9	Install . . . . .	12
1.10	Bugs . . . . .	13

---

# Chapter 1

## ProTracker3.52

### 1.1 Protracker V3.52 Quickguide

Welcome to Protracker 3.52

The story continues ...

Copyrights

Authors

Prologue

User Info

Epilogue

History

Credits

Bugs

Install

### 1.2 Copyrights

Rights & Copyrights

Difficult to say. In princip all trackers based on Karsten Obarskis SoundTracker (commercial, 1986). But after all the Sound/Noise/ProTracker evolutions they are

---

completly new programs. If you in order of the law i think you must buy an old Soundtracker.

On the view of the programmers of ProTracker the copyrights are:

Protracker V3.15 are © 1992-1993 Cryptoburners  
Protracker V3.52 are © 1996 TEC Design (improvements)

and are FREeware. For additional Cryptoburner copyrights read his docs.

Any payment and distribution what are over the costs of 5\$ per unit is strictly prohibited. Protracker is not an commercial tool!

The distributors of the AMINET serie, Fred Fish , Meeting Pearls and all bulletin boards who works without payement have the right to spread this package without request.

## 1.3 Authors

The short Protracker programmers history:

(for more infos read the user manual)

PT V0.9 - V1.3	© Amiga Freelancers
PT V2.0 - V2.3	© Mushroom Studios
PT V3.0 - V3.15	© Cryptoburners
PT V3.30 - V3.52	TEC Design

In march 1996 opens a distribution site in germany (ftp.informatik@uni-rostock.de ↔ )  
and i hope that AmiNet support the new versions.

If you leave a mail to me, please use comp.sys.amiga.pogrammer where i read everly day.

## 1.4 Prologue

Prologue

In oppositon to other programmers i release significiant changed new versions

---

much more often than in other projects. I think its better to make a transparent view of all interested users shortly possible.  
 And if anybody in affront with the dayly releases: the change of PT315 against PT318 from Cryptoburners has had only 2 changes (or shall i say bugfixes), so take a look to our work.

It seems to be a great interest on a new Protracker, so I'm sorry that Cryptoburners stopped the development of it, or if they leave this, not make the source public.  
 Hope that the PT project is the logical way of this great standart music tool.

### Background

Over the years defines the Noise/ProTracker an standart in composing electronic music. Many clones and enhacements follows, but Protracker IS the standart who use almost all tracker composers on Amiga.

Today two familys of the protracker series exists on Amiga:

Amiga Freelancers Protracker V2.X and Cryptoburners V3.XX. These programs are based on the V1.1B sources from Amiga Freelancer, wich made his source public as they had no more time to support this project.

The V2.X series is more stable, but blocked the CPU with loops. Additionally the screen layout and handling is out of date. The V3.X series (other programmms, other point of views) is in MedRes (640x256), locks also much better and has many new features.

But as musician it is angry to see that Cryptoburners has kicked out some tools: PLST and PED, the sample management tools; the help function, sadly for beginners, are also going the way to >NIL:.

As I saw ProTracker3 first, i was impressed. Better design and better trackhandling. But over the months I must see that V3.X is a bit unstable. Many musicians use the V2.3 releases; if I made in hours an module and and guru follows I was too angry to make this experiment again.

Now, nobody is perfect. Over 2 years was Protracker not updated. Cryptoburners ride another way, so I think that I have the right to made the completest Protracker on amiga ever made (what a phrase, hope nobody can remember that I spoke this words already in 1987 by the Soundtracker 2 projectwich was never finished).

Over the christmas days I reassembled the last official Protracker V3.X, release V3.15 from 1993.

Many hours of debugging follows, so I have additionally to the improvements removed all me known bugs.

### Quick Overview for new function keys

- HELP select = CTRL+Help => select for Help key
- PLST select = LSHIFT Help => select for Help key
- PED select = LALT Help => select for Help key
- PED = LALT Ö (german keyboard)
- PLST = LALT ä (german keyboard)

Info system = LALT # (german keyboard)  
Setup = LALT - (german keyboard)  
VOLUME UP = LALT .  
VOLUME DOWN = LALT ,

#### Implemented and changed

- PED inserted
- PLST inserted
- Online Help inserted
- Infosystem with realplaytime-calculation inserted
- Key repeat: better handler inserted (V2.3)
- XPK Support for MOD-Files
- Local changeable keyboard drivers

#### Bugfixes against original Protracker V3.15:

- Loop Guru error (Sample Window open, DirWin open, toggle loop on/off and by sliding loop markers system crashed)
- several D4-D7 destroys  
(hey, see ShowText routine to calculate what registers are public!)
- sample calculation (end detect buggy)
- AGA Sprite fix by using hires pointer or/and VGA Only
- Arrow key down  
(by kicking out PLST you are snapped also an RTS:-( )
- doubled marked lines in Dir Window
- several key quests
- some minor bugs i have forgot since i removed them at the stand

#### Used equipment

- Amiga 4000/30 50Mhz 16MB RAM 2 Gig Harddisk
- Commodore 1942 Monitor
- DevPac V3.14 and OMA 3.0 Assembler  
(since V3.52 ASM One 1.29)
- TurboText 2.0 Editor
- MungWall/Enforcer  
(runback startcode made 4 enforcer hits, they are harmless)
- Heddley

#### Tested on follow machines

- A500 / 1 MB RAM / Harddisk
  - A2000 / 3 MB RAM / Harddisk
  - A2000 / 5 MB RAM / Harddisk / A2630
-

- A3000 / 2 MB RAM / Harddisk
- A1200 / 6 MB RAM / Harddisk
- A1200 / 6 MB RAM / Harddisk / MTEC 42 Mhz
- A4000 / 16 MB RAM / Harddisk / 68030
- A4000 / 16 MB RAM / Harddisk / Cyberstorm 68060

## 1.5 Userinfo

### User Info

For my own projects i searched for a Protracker compatible Tracker who has all those features I loved on this tool, what was stable, has all functions I need and works on newer Amigas. So I collected the features of various versions and if finished, I made it public.

The development includes following points:

1. More stable and seriously to use
2. Old keymap handling (if i pressed 8 keys i will see 8 :-)
3. Help included and updated to V3.X standart
4. PLST included
5. PED included
6. Different analyzer included
7. Screen mode requester (difficult, much work :-/)
8. Info Bar

For all system-compatible fanatics (what is system-compatible, I know that many of my todays favourite, good programmed tools usually crashed in the next version of Amiga-DOS, that was yesterday so and will be tomorrow so, or you buy an MS-DOSe with the overhead of the 70's):

Protracker is NOT system-friendly, PT will be user-friendly. All those dozends keyboard shortcuts we loved and the whole handling can be not fully implemented with todays AmigaDOS, so we leave the path of the RKMs.

We want NOT:

- \* No more Tracks if Escom not brings an new soundchip
- \* Other fileformat. I would love to see your faces if I had made this, but let the church in the town today. It works, and that stable.

## 1.6 Epilogue

### Epilogue

Protracker V3.52 Pro fix is intensive tested in the last weeks by many persons, and as result of the fixing a few bugs removed, other bugs can be present.

---

It seems to be that Cryptoburners has no interest to support the Protracker project anymore, so I think I have the right to make the improvements public. and call this an big bugfix.

P.S.: Sorry for this funny english, but it's not my native language and my schooltime is since years going by.

If anybody has interest to force the protracker project back to the way of 1996, please contact me and if you are serious you request the complete source codes, documents etc. Today the source is to 80% COMPLETE documented and relabeled.

The last word goes to Cryptoburners. Your work is great. Too sad that the development of Protracker is stopped. Good luck for the future.

T.B.

----- And always remember: the future is unwritten -----

## 1.7 History

History:

remark: all beta versions are internal revision for the testers of PT

24.01.96

Initial Release

- AGA fix from Protracker Screen
- Fix Hires Sprite/Mouse pointer problem with Protracker
- DMA handling fixed to longwords
- load routine from MOD's (Try to load a MOD with sample names ASC's greater than \$120 in the original, hope it works now perfect
- key quests (I'am in progress to write a completly new routine, in present i simple block all illegal quests :-( )
- Sample memory allocation (try to load an sample in an virgin Protracker V3.15, open sample window, select Loop On and slide the end loop marker by open DirWin :-( )

30.01.96

Beta 1

- Help System reincluded (Try to press the help key)
- Wrong code for Memory pools rewritten (args, i hate reassembled code)
- System messages included on a view points (Status line)

12.02.96

---

## Beta 2

- PLST included
- Keymap quests completely rewritten
- Input Handler improved
- shortcuts for german keys implemented :-)
- GFX pac format changed (faster)
- bugfixed a view parts (Arrow keys, DoDataLoad etc)
- while playing MOD (not Pattern) and Sampler Screen is opened note-key pressing now works
- little mysterious: Tooltype in ProTracker was not correct setted and some people can't started PT (I use other icons than the originals or prefer Shell)

## 18.02.96

## Beta 3

- Cleaned up whole code from unused code
- fixed Screen swap (LAmiga N/M) with setted Textflag
- fixed old Problem with crash if Dir and Sampler Window is open and you load first sample, clicked on 'Loop On/off' and draw the loop sprites (cludge, but works perfect) (its a problem by using same Sprite flags for sampler and dir list scroller)
- included PED. Original code is almost useless. Original code seems to be coded by trial & error and extreme buggy by variable Screens.  
To do in PED: \* Mouse quests by direct clicking on names variable PLST entries (fixed on 2500 since i have the config part new written)
  - \* hangup problem by scan and over 3500 Files
  - \* Finetune Flag
  - \* decimal show of numerical entries
- deadlocks on input device
- PLST fixed by empty entries in PLSTMemOffset
- Sampler window offsets
- FIB\_FileType fixes for other File Systems
- all external cfg/data files kicked in S: (PLST/PT.help etc)
- Memory fix for GFX screens (RAM lost by ending)
- some cosmetical stuff (TXT,GFX)

## 19.02.96

## Beta 4

- Sorry, but by cleaning the code i forgot some routines to include.
- Memory Pool for PLST now cleared by exit (no loosing RAM anymore)
  - CTRL+ keymap requests are cleaned.
  - Added Mouse quests for the PLST and PED gadgets on mainscreen
  - Scrollroutines for PLST and PED completely new written because the old are too buggy
  - added delays in PLST/PED scroll up/down
  - last sample now becomes the correct offset. Before it was 25 Bytes too long
  - PED had ignored the first PLSTmem Sample entry. Now fixed
  - Samples with Spaces in filenames now correctly recognised
-

20.02.96

Final Beta

- forgot the key quests in Pattern insert/del etc. Now works with the new keyboard handler
- PED now works in all functions and 300 lines assembly language more
- Added scroller buttons to PLST
- Improved PLST lister
- fixed Bitplane 0 in all GFX. If you work with other background than black it was ugly. Now correct.
- Several layout changes in PLST, PED etc
- Added Screen switch buttons to PED, PLST, Help etc
- new: Info System (check it)
- Added several shortcuts (test it, documentation follows, e.g. LALT / = Setup Display)
- Fixed problem with the Loop On Flag + PLST screen
- Now Mouse clicks in PLST/PED etc correct calculated with Cryptoburners mouse table system
- Mouse clicks in PED lister now works (Delete/Edit)
- Added all functions also as buttons on Main Screen (Help/Info/PLST/PED)

21.02.96

PT3.30

- First Release. No risk no fun, but by final beta the changing of Assembler are angry. OMA incredible fast, but error check are lazy :-(. Now we have hopefully a better result and check all functions AFTER last compilation. Ok, I'am stupid :-)
- Fixed my bugs: PED Enterdisk, Loop not changeable
  - Find finally the loop guru error if Currentscreen not main: ShowSampleInfo was not blended out
  - InfoSystem
  - Config Save now again correct
  - included a view register saves to made the code more stable
  - now tested by the best method: by making a module 8-)

23.02.96

PT3.30 Beta 1

- keyboard routines overwritten, repeat now stable by most functions and most problems forgotten
- old CAPS Lock on/off switch to toggle keyboard repeat again included. Too many musicians like this function
- Info system enhanced and debugged. Forgot to clear the 32. line by info. Now realtime-calculation of modules included!
- New shortcuts:
  - LALT + , Volume down
  - LALT + . Volume up
  - LALT + - Preferences
  - LALT + ö PED
  - LALT + ä PLST
  - LALT + # Info System (german keyboard)
- harmonised the whole interface, e.g time infos and analysers also visible if other EGs opened

- volume slider refresh now always correct
- included load check of old 2.3 100-Pattern mod, blocked (if anyone needs 100Pattern Mode i must include this)
- rearranged some GFX
- All code if available now in Fast RAM
- new replay routine from Håvard Pedersen (PTSupport Arc) included, it seems to be much more stable than the old
- added some internal code sanity checks

24.02.96

PT3.31

- Shifted keymaps in Getlines works again
- correct gadgets in Disk Format functions
- removed bug who makes more marked lines in DirWindow than on mouse position if medium are slow enough
- improved speed of playtime calculation
- reset the keyboard shortcuts LALT,CTRL etc. now correct in all situations
- IFF8SVX detection saver

03.03.96

PT3.32

- keyboard broker included against deadlocks from Rawkey
- PED routines overwritten. Now its possible to use samples with real spaces and national font symbols in PLST/PED.
- PLST double check debugged. Empty strings now compete backfilled.
- Info System minor bug removed (32th line was bad filled).
- BPM changes now always visible, also by FXX commands.
- changed Doc to Amigaguide format and include Installer.
- CTRL/SHIFT/LALT/LAMIGA + Help works again.
- CTRL+SHIFT+ 1-7 now again the additional screens 1-7
- Keyboard repeat now on all machines in the same speed
- AGA Check routine rewritten and now correct Settings of Chipset on AGA and Non-AGA machines

06.03.96

PT3.33

Suddendly the last version for a longer while, since i must finished my Diplom. If anybody has ambitions to continue this project coz' he has more time, contact me.

- Memory allocation for Samples now works with faster RAM, nasty Errorcode from V3.32 removed.
- Optimized =>68020 Code included
- Partialy refreshed Online-Help
- PLST Entries now variable, not fixed to Config or me
- Installer Scripts
- removed minor Bug in Drive detection in DirScreen
- Screen Opens same as 3.15 again in 640X12, save Chip RAM
- fixed bug if insert another Disk sometimes crashed PT
- fixed Dirscreens toggle MOD/SONG/EXECUTABLE/SAMPLE

09.03.96

PT3.34

- Special version for our musician, so i made this
- Support for national keyboard layouts added (s:pt.keymap)
- XPK- Support for MOD-Files added
- PP Loadroutines swapped to XPK-Support

PT3.35-PT3.50

- internal versions

15.03.96

PT3.50

- With a mistake an unofficial, buggy version was spreaded yesterday, so if you have problems show at startup message, the official version has the date 15.03.1996!
- Much more usage of standart system routines, more stable e.g. added for the most waitstates (scrolling delay etc) the standart doslib \_LVODelay call, so it should in the same speed on all those various CPU speeds.
- internal gfx depacking optimized
- bugfixes on doloaddata, ped2.3/plst2.3 and processrawkey
- correct calls of xpkmaster.library and internal buffer speedup
- whole PLST overwritten
- Smart optimations in patternsroll  
now on test blank A1200 (slowest i can grab here) no more showable delays also in 250 BPM
- Overwritten onlinehelp
- drumpad mode works now also on A2000/3000/4000 keyboard
- mouse problems on some A4000, workaround
- gadgets are visible are now usable (eg Help + Edit Options)
- Back to the old GFX Design
- forgot to use the internal keymap if no external is loaded.

-----

Now we have an point to stop the versionsnumber inflation and develop more serious, but we need the distant point to the original.

19.03.1996

PT3.50B

- XPK Support for Samples, Songs, Instruments in DirWin ... added
- fixed bug in timer calculation who's not was correct resetted (H.ROHNER report)
- E9 command sometimes crashed by \$9 -\$F, fixed
- verify the error reports with mouse freeze: is definitely TinyMeter (same input.handler hack as PT) or sometimes MCP
- fixed memory wizards in LodSong/LodSampleQuick
- Gadgets are visible are now always usable, PLST, Help etc now let other gadgets on screen free

02.04.1996

PT3.50C

(Sorry, i have ABSOLUTE no time the next weeks, this quirk came in a big hurry for some 'crying' users)

- Fix for input handler, was hanging by my fault by some programs, e.g. MCP

20.04.1996

PT3.50D

(Bugfixes after reporting from NeuroDancer)

- input from numeric '0' quits the pos/patt/length etc arrays (fixed)
- Left Shift + DEL = Delete CMDs & Patterndata works again
  - serial device errors by playing: this is the MIDI control
- FU/FD in Sample Edit now toggled
- Keyboard routines now safer
- fix a bug in PLST by clicking on 2th last Samplename crashes the whole system if name is 16 Bytes long
  - GFX corrections in PLST/PED
- German keyboarddriver space fix

23.04.1996

PT3.51

- Cleared Interface, GFX buttons, scrollers ...
- Status line now shows permanently Editskip
- more system messages
- Playtimecalculation now from days to milliseconds :8)
- fixed some problems with stringhandling in FIBs
- final testing from A500 to A4000/060 and some code optimations
- bug in DirWin by trashing in Directorys with more than 500 entries removed
- alien gadget borders in PLST removed

01.05.1996

PT3.52

- guide now also 2.X compatible
  - some GFX trash errors in GUI removed if background was not black
- midi input implemented
  - fixed input handler for old 68000 CPU's

02.05.1996

- rewritten and included installer script for the Aminet release
    - fixed some nasty bugs in screen refresh in PED
    - find long standing bug that sometimes the instrument after stopping the pattern play is not
-

- played
- fix the bug that Tab Cursor sometimes not stopped
- made whole config I/O PC-relative to ensure that FIB for Mod section was not overwritten while reloading
- fix ILBM Image decoder (internal GUI decoder)
  - gadget routines removed from some alien gadgets (Help/PED)
  - whole GUI ILBM's

## 1.8 Credits

Who we will be started ...

Let too many personal greetings outside, or this document is horrible long:

Memorials without tears blowing to ByteMechanics of the 70's  
(Hi Martin, d ya remember on my first selfmade Z80 with the fantastic 512 Byte static RAM? It has had this nice sound produce with an TTL-FlipFlop logic and 7 tones-sound :-)

All good wishes are goin' to my old fighters of Ikari and Sector 8 of the 80's  
(Don't worry, Hungary now has great trouble, but the logical consequence is for humans always to dream, then only in our dreams we can be what we the whole live fighting for.

Last not least after 5 years of abstinence i have to greet some guys of these old days who made my life a little bit easier without this stupid software-shuffler-mentality, with great moral support and nice discussions:  
Thanks for all to AMO & Rainer Benda, Sysops in wild germany and C= Oldies.

And to all the rest of yours, who don't think they are Elite, but do their job as good as possible.

- End of text -

## 1.9 Install

Commercial break

An excellent PT Manual you will find in Aminet/MUS/EDIT from Håvard Pedersen if you are need help for general sophistic usage.

How install this package:

---

Simplest way is to use the Installer script. To made the installation procedure correctly, you must have booted from your hard disk and need the Installer from Amiga Technologies in your path assignment.

If you install manually, follow these points:

1. Copy all files from the s drawer to s: from your harddisk. There are:

- pt.help ... The PT Online Help if you press Help
- pt.keymap ... If in S:, the german keyboard driver. If not here, the standart US map is used. For other languages (easy to change, simply use an HEX Editor and change your keycodes you wish; show in the 'support' drawer.)
- PLST ... loaded and saved in S:, your Sample list for PED/PLST
- pt.config-00 ... The main config, was loaded by start. If not aviable, PT use the internal standart configuration.
- Protracker ... The tracker mainfile, copy anywhere.

libs:

- xpkmaster.library (if you need xpk unpack option enabled)
- powerpacker.library (if you nedd powerpacked mod crunching enabled)

(Both libraries not included, but should to be find in Aminet/PD pools)

Please ensure that you created an drawer who included the follow directories:

```
modules
songs
samples
```

Add an assign 'ST-00' to this drawer.

## 1.10 Bugs

Known Bugs and problems

Protracker is not very system friendly because the restrictions of the long evolution phase and fact that many programmers has made this tracker to that what it is today. For 10 years other facts in programming are state of art.

As it is, PT3.52 was tested on ALL Amigas from A500 to A4000/Cyberstorm060 with CyberGFX Card and WORKS. If you have problems due the ignorant input handlers from PT, check if ALL your Commoditys/Tools are clean enough to overstand the PT attack :-(. It's not my fault, it is by ALL PTs the same.

The follow points are known and in work to fix it:

- Enforcer hits by starting in CPU stack area (input.handler hacks in a bad way the system vectors)
- memory fragmentation by using packed datas
- Screen switching with other keys than LAMIGA M/N or the Cyclegadget

- righmost
  - keyboard handling in text input gadgets not clean
  - TinyMeter has problems with his input.handler by Protracker if  
    the DirWindow is opened
-