

# **Digiboost**

Tomasz&Waldemar Piasta

<b>COLLABORATORS</b>
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	<i>TITLE :</i> Digiboost		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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<b>REVISION HISTORY</b>
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NUMBER	DATE	DESCRIPTION	NAME

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# Chapter 1

## Digiboost

### 1.1 DIGI-Booster

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```
=====
DIGI Booster professional 2.17 (26.11.1997)
=====
```

```
- SHAREWARE -
```

```
by Tomasz&Waldemar Piasta. All rights reserved!
```

```
Official Digi Booster support BBS:
Magic Galaxy BBS +49 40 612 617
```

```
~Copyright           ~
~Disclaimer          ~

~Requirements        ~
~Features~~~~~      ~
~Authors~~~~~       ~
~Registration        ~
~Changes~~~~~ ~     ~

~Supported formats   ~
~List of Effects     ~
~Keyboard shortcuts  ~
~DBM format~ ~       ~
~About Sampler       ~
~Envelope editor     ~
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~Composing MODs&XMs  ~
~Benchmarks~~~~~    ~
~Hints~ ~~~~~~      ~
~Problems ~~~~~~    ~
~Protection !!!      ~
```

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```
~Development~      ~
~Future~~~~~      ~
~Greetings&thanks  ~
```

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## 1.2 DSP Echo - realtime effect

DSP Echo :

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If you want use this realtime effect you must set Echo "Fast" or "Enabled" in advanced settings using AHI preferences program.

In DSP Echo window you can find some parameters:

DSP Delay is the delay in miliseconds.

DSP Feedback defines how much of the delayed signal should be feed back to the delay stage. Setting this to 0 gives a delay effect, otherwise echo.

DSP Mix tells how much of the delayed signal should be mixed with the normal signal. Setting this to 0 disables delay/echo, and setting it to 255 outputs only the delay/echo signal.

DSP Cross only has effect of the current playback mode is stereo. It tells how the delayed signal should be panned to the other channel. 0 means no cross echo, 255 means full cross echo.

For best performance set "Fast Echo" but even with "Fast Echo" turned on, this effect slows down your computer.

## 1.3 "

Composing modules in MOD and XM format

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Digi Booster Proffesional is able to export modules in three different music formats, these are:

- DBM - original Digi Booster Pro format - very flexible and most expanded
- MOD - old Pro Tracker and Fast Tracker 1.x (pc) module format
- XM - very popular Fast Tracker 2.x (pc) format

We advice to save modules in DBM because it's a very flexible and most

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expanded music format. It is supported by all most known players on Amiga platform.

When you intend to export mods in MOD or XM format there are restrictions you must obey.

MOD format has following limitations:

- max 32 channels
- max 31 samples
- max sample length is 128K
- max number of patterns is 100
- pattern length is 64 positions
- only one command per line
- no envelopes
- no DSP effects
- three octaves
- no 16 bit samples
- only one song
- and more...

XM format has following limitations:

- max number of channels is 32
- max number of song positions is 256
- there's only two commands per line and one of them is volume command only
- you can't save DSP echo parameters
- XM doesn't support following commands:  
Oxx (slide sample offset), Sxx (set real BPM), Vxx (activate echo on channel), and Wxx, Yxx, Zxx which are DSP echo params
- only one song
- envelopes consist only 12 points and there is 1 sustain point
- and more...

Also we do not advice you to save your module in XM format while composing, if you have to export your work in this format do it only when the module is finished because there could be problems with converting finetunes and envelopes.

## 1.4 Copyright

Copyrights :

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The program Digi Booster Professional in this version and its documentation files are (C)copyright 1997 by Tomasz & Waldemar Piasta. All rights reserved.

The right of using full version of this program is granted to you by paying the SHAREWARE-fee of 50 DEM (30 U\$) to the authors.

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You will receive a full personal version of program. See registration form for details.

Digi Booster makes use of:

Ahi.device by Martin Blom (aminet/dev/misc/ahi.lha)  
Reqtools.library by Nico Francois

WARNING!!!

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Digi Booster Pro is protected in a special way:  
If we will get cracked version of our program or installer we will know  
who cracked DBpro or give it to someone who did it and you  
will take the criminal consequences of this !!!

## 1.5 Disclaimer

Disclaimer :

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The authors take no responsibility for any results of the use of this program.

This software is provided "AS IS" and there is no warranty of any kind, so that you use this software at your own risk.

But... you know: no risk no fun :-)

## 1.6 Requirements for work with Digiboost:

Requirements:

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- Any Amiga with 68020 or better
- Kickstart 2.0 or higher (kick 3.1 is recommended)
- ahi.device V4 (Audio Hardware Interface available on Aminet: dev/misc/ahi.lha) by Martin Blom
- asl.library & iffparse.library (ahi.device makes use of this libs)
- reqtools.library by Nico Francois

## 1.7 DigiBoost' formats:

## Formats:

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## - Supported module formats from other editors and platforms:

- S3M (Screamtracker3 / PC)
- XM (Extended module / Fasttracker2 / PC)
- Octamed (MMD0,MMD1-MMD3 / Amiga)
- MOD (Protracker 3.15-4.0ß / 4-32Channels / Amiga)
- Digi (Digibooster 1.x / Amiga)
- Oktalyzer (4-8 channels / Amiga)

## - Supported sample formats from other platforms:

- IFF8SVX (only mono / Amiga / 8 bit)
- IFF16SV (only mono / Amiga / 16bit)
- RIFFWAV (mono/stereo / PC / 8bit/16bit)
- AIFF (mono/stereo / Amiga;PC;Mac / 8bit/16bit)

## 1.8 Features...

## Features :

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- supports following formats: XM, S3M, MMD0-MMD3 (Octamed/SS), MOD (4-32 CHN) OKTALYZER and DIGI (Digi Booster 1.x)
  - mixer (HD rendering) option included which allow to render your module to AIFF or AIFC sample then you are able to convert these formats e.g. to CDDA or MPEG audio formats
  - realtime DSP effects: echo, cross echo, delay, cross delay, hall and works on defined channels; it means that you are able to active DSP with selected tracks
  - optional 32 bit HIFI mixing with linear interpolation in realtime
  - 100% assembler code
  - Export \*.XM files (4-32 channels) - not in unregistered version
  - Export \*.MOD MOD.\* files (4-32 channels) - not in unregistered version
  - up to 128 channels (4/6/8/10/..../128)
-



- up to 7 octaves
- 16MB maximum sample size
- AHI support (at this moment there's support for following sound card: Tocatta, Delfina, Wavetools, Prelude, Melody, Maestro and of course for Paula)
- DeliTracker and Hippo player support
- source code of player included
- two different commands in one line and in same time. It means that you can use for example: sample offset command 9xx and vibrato 4xx
- 8 and 16 bit audio modes (so you can load to Digi Booster 16 bit samples) formats supported: IFF8SVX ; IFF16SV ; RIFFWAV 8BIT ; RIFFWAV 16BIT; AIFF 8/16BIT / STEREO/MONO

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## 1.9 More features...

Features (2):

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- max. 256 samples (only in editor, but file format (DBM) supports max 65535)
- max. 1024 patterns           -||-
- max. 1024 positions       -||-
- almost all key shortcuts and commands are Pro Tracker compatible
- ping pong loop and command E3x - backward play
- realtime instrument effects:
  - volume envelope
  - boost envelope
  - filter envelope
  - offsets
  - panning envelope and much more
- envelope consists of: 32 points
  - 2 sustain points
  - 1 loop
- instrument/sample mode; you can use the same sample a few times with other parameters e.g. you have string sample no. 1 and you want use this sample a few time, each with different finetune, volume, loop and let's say one with volume envelope, second with boost envelope. In normal tracker (like Pro Tracker) you have to load the same sample two times to memory. In DB pro you have Instruments. So you have to do following things:
- load sample to bank no. 1 ; so you have an instrument no.1 which use

sample no.1

- in instrument no. 2 change sample bank to no. 1
- now you can set different effects and parameters to instrument no. 1 and no. 2

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## 1.10 Digiboost-effect parameters

Digi Booster has almost fifty effects. All Pro Tracker effects are supported (without Efx).

If you want to use panning you must set audio mode with stereo++ in AudioModeConfig.

Here you are a full list of Digi Booster Pro II effects.

(\*) = If the command parameter is zero, the last nonzero parameter will be used.

0xx	Arpeggio
1xx (*)	Portamento up
1Fx (*)	Fine Portamento up
2xx (*)	Portamento down
2Fx (*)	Fine Portamento down
3xx (*)	Glissando
4xx (*)	Vibrato
5xx (*)	Tone portamento+Volume slide
5xF (*)	Tone portamento+Fine Volume slide up
5Fx (*)	Tone portamento+Fine Volume slide down
6xx (*)	Vibrato+Volume slide
6xF (*)	Vibrato+Fine Volume slide up
6Fx (*)	Vibrato+Fine Volume slide down
8xx	Set panning
9xx (*)	Sample offset
Axx (*)	Volume slide
AxF (*)	Fine volume slide up
AFx (*)	Fine volume slide down
Bxx	Position jump
Cxx	Set volume
Dxx	Pattern break
E00	Low pass filter on
E01	Low pass filter off
E1x	Fine portamento up
E2x	Fine portamento down
E3x	Play from backward
E40	Turn off sound in channel
E5x	Turn on/off channel
E6x	Set loop begin/loop
E7x	Set offset
E8x	Set panning
E9x	Retrig note

EAx	Fine volume slide up
EBx	Fine volume slide down
ECx	Note cut
EDx	Note delay
EEx	Pattern delay
Fxx	Set tempo/BPM
Gxx	Set global volume
Hxx (*)	Global volume slide
K00	Key off
Lxx	Set envelope position
Oxx (*)	Sample offset slide
Pxx (*)	Panning slide
Sxx	Set Real BPM

The commands listed below works only if you have Echo option enabled in AHI preferences:

V00	Turn DSP echo on in channel
V01	Turn DSP echo off in channel
V10	Turn DSP echo on in all channels
V11	Turn DSP echo off in all channels
	Default is: echo turned off in all channels.
Wxx	Echo delay. It is a value between 00 and ff, and defines time of delay. 01 means that sound will be delayed 2 ms (0.02) of second. Default is: W40 - 128 miliseconds ; 0.128 sec.
Xxx	Echo Feedback. It is a value between 00 and ff, and defines how much of the delayed signal should be feed back to the delay stage. Setting this to 0 gives a delay effect, otherwise echo. Default is: X80
Yxx	Echo Mix. It tells how much of the delayed signal should be mixed with the normal signal. Setting this to 0 disables delay/echo, and setting it to ff outputs only the delay/echo signal. Default is: Y80
Zxx	Echo Cross. It only has effect if the current playback mode is stereo. It tells how the delayed signal should be panned to the other channel. 0 means no cross echo, ff means full cross echo. Default is: ZFF - full cross echo.

## 1.11 What do you want us to do?

Future:

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- realtime resonance filtering (tb303 like acids)
- Power PC Plugins

- more envelopes like boost, filter, pitch etc.
- your proposals :-)

## 1.12 Some hints for proper work with Digibooster

Some hints:

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If Digi Booster crashes while starting or selecting AHI audio mode we suggest you to check if you have correct versions of following libraries:

- asl.library
- iffparse.library
- reqtools.library
- diskfont.library

You can also check AHI device and its AudioModes.

If you have slow machine you can increase speed by limiting mixing frequency in a config option.

Also you can speed up the whole program by loading Kick3.1 into a fastram (use BlizKick). Ahi.device works faster using Kick3.1. It is very important to run Digi Booster pro and AHI with Kickstart 3.1. See ~Benchmarks~

For best quality of sound run CyberSound 14bit\_calibration and then select a tables/calibration audio mode in Digi Booster config window.

DigiBoosterPro doesn't like MCP & likewise - only sometimes :-)  
(Don't know why) so if you don't want to crash your machine change MCP to MCX (it's better & more safety program).

## 1.13 Greetings fly to...

Greetings & thanks:

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- Martin Blom for ahi.device
  - K-P Koljonen for some help
  - Patrick Beerhorst for documentation in guide format
  - Jan van den Baard for GadToolsBox
  - Nico Francois for reqtools.library
  - T.F.A for ASM-one
-

- Peter Kunath
- MacGyver for his bug reports
- Claus Morell
- Anders Andersson
- All registered users
- All people from Investation & Dinx Project

## 1.14 "

Digi Booster Pro was developed using ASM'one, Amiga1200, Blizzard IV, 18MB ram, 1.3GB hd and Kickstart 3.1 & other stuff...

If there are some big firms which want to make DB a real commercial product please contact us as soon as possible.

## 1.15 Digibooster module format:

Digi Booster PRO - DBM0 file format by Tap of Inv

DBM is Iff like format. It means that module consists of hunks. Each hunk has a 4 bytes identification and after that hunk length (LWORD - 4bytes).

If the module doesn't consist of any hunk, for example VENV - volume envelope hunk that will mean this module doesn't use volume envelope effect.

These hunks DBM module should always consists of: NAME, INFO, SONG, INST, PATT, SMPL

Offset	Length	
0	4	ID "DBM0" - module identification
4	2	tracker version:
		eg. \$0200 - version 2.00
6	2	reserved
8	4	ID "NAME" - module name hunk identification
+4	4	hunk length
+8	44	mod name
???	4	ID "INFO"
+4	4	hunk length
+8	2	number of instruments in module
+10	2	number of samples in module
+12	2	number of songs in module

+14	2		number of patterns in module
+16	2		number of channels
-----			
???	4		ID "SONG" - songs hunk identification
+4	4		hunk length
+12	44		song name
+56	2		number of orders for this song
+58	???		order list (words) NOTE: Each order list can use the same numbers of patterns.
-----			
???	4		ID "INST" - instruments hunk identification
+4	4		hunk length
+8	30		instrument name
+38	2		sample number used in this instrument
+40	2		instrument volume
+42	4		instrument finetune (stored in HZ)
+46	4		instrument repeat start
+50	4		instrument repeat length
+54	2		general panning (0-256)
+56	2		flags:
			bit 0 set - forward loop used
			bit 1 set - ping pong loop used
-----			
???	4		ID "PATT" - patterns hunk identification
+4	4		hunk length
+8	2		number of positions (rows) in pattern
+10	4		size of packed data
+14	???		packed pattern data
-----			
???	4		ID "SMPL" - samples hunk identification
+4	4		hunk length
+8	4		flags:
			bit 0 set - 8 bit sample
			bit 1 set - 16 bit sample
			bit 2 set - 32 bit sample
+12	4		sample length
+16	???		sample data (unsigned)
-----			
???	4		ID "VENV" - volume envelopes hunk identification
+4	4		hunk length
+8	2		how many volume envelope tables does this hunk contain
+10	2		to which instrument this volume envelope data belongs
+12	134		volume envelope data
-----			

-----  
Volume Envelope structure:  
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Each volume envelope table takes 134 bytes.

Max. number of points is 32.

Max. number of sustain points is 2.

Max. number of loops is 1.

Offset	Length	
+0	1	type    bit 0: envelope on/off bit 1: 1st sustain on/off bit 2: envelope loop on/off bit 3: 2nd sustain on/off
+1	1	number of envelope points
+2	1	1st sustain point
+3	1	loop start point
+4	1	loop end point
+5	1	2nd sustain point
+6	1	reserved
+8	2	1st point time (in vblanks)
+10	2	1st point volume (range: 0-64)
+12	2	2nd point time (in vblanks)
+14	2	2nd point volume (range: 0-64)
+16	2	...

#### Packed pattern format:

If the byte is zero it means that you must skip to next position (row).

If the byte is nonzero bits are interpreted as follows:

```

bit 0 set: Note follows (byte)
bit 1 set: Instrument number follows (byte)
bit 2 set: 1st effect type follows (byte)
bit 3 set: 1st effect parameter follows (byte)
bit 4 set: 1st effect type follows (byte)
bit 5 set: 1st effect parameter follows (byte)

```

Next byte is a channel number to which this data belongs.

Example:

```

00 - skip to next pattern position
00 - skip to next pattern position
03 - byte is nonzero; the bit 0 and 1 is set; take note and instrument
24 - channel number to which following data belongs
81 - note (hex: $51 - this is a 5th octave and 1st note)
04 - instrument number

```

-----  
Last words  
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I think these informations are enough at the moment - the format is rather self - explaining. But if you have any problems you can always contact me.

## 1.16 Authors

Programmers:  
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Poland

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Tomasz Piasta 30.11.1977  
studying Informatics

Waldemar Piasta 19.10.1975  
studying Sound Engineering

~How~to~register?~

Amigaguide-Deutsch:  
-----

Patrick Beerhorst

E-mail:Syntec@Stardate.Westfalen.de

## 1.17 Registration

Registration:  
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The right of using full version of this program is granted to you by paying the SHAREWARE-fee of 50 DEM (30 U\$) to the authors.

You will receive a full personal version of program. See registration form for details.

If you want to use DBM modules in commercial products you have to register.

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Please fill in the registration form included in this archive and send it to:

Tomasz & Waldemar Piasta  
Poprzeczna 66/6  
51-167 Wrocław  
Poland

The registration may last 2-4 weeks. So do not worry :) and be patient. This is because of great snail-mail. The first registration is possible only via standard mail.

After sending registration form and money to us you will receive a personalized latest version of DIGI Booster Pro. If you are a registered user of DIGI Booster Pro you can make an upgrade for free (via E-mail) or for only \$5 or 10DEM via snail-mail (cost of shipment) by sending us the money and disk. The rules of upgrading may be changed in future!!!

Thanks a lot for your support!

## 1.18 Changes

Changes in V2.17

- improved XM loader (fixed loading of panning envelopes)
- fixed a bug in Kxx command (key off after x vblanks)
- added possibility to setting up the BPM, tracks number and pattern length using keyboard
- added export XM
- improved loader for iff8svx and iff16sv samples
- added new scopes routines especially for gfx boards
- added new pattern scroll routine especially for gfx boards

Changes in V2.16

- new boost option (the last one was terrible)
  - scopes work about 50% faster on Aga machines now and don't slow down player
  - added a ping pong loop for volume and panning envelopes
  - now you are able to save (with Save Ins option)/load sample together with parameters like: volume envelope, finetune, ping pong loop and
-

panning envelope,

- added echo option in sampler window
- improved XM loader
- when you change a number of pattern while playing DB pro doesn't change datas in pattern editor; now it is fixed,
- added playing sample in volume/panning envelope and DSP window
- added normalize option in sampler (max volume without distortion)
- loader for DBMs is more intelligent (doesn't crash when after module is some data)
- added DSP echo window see DSP echo window
- added DSP echo commands: Vxx, Wxx, Xxx, Yxx, Zxx, for more details see list of effects~
- no system crash when you change instr. number to 0
- volume boost in mixer window works fine from now

Changes in V2.15

- fixed bug which caused guru on kickstart 2.0
  - fixed bug which caused enforcer hits while setting priority via rom function
  - added some keyboard options like:
    - alt + '+'
    - alt + '-'
    - alt + '\'for slide effect value up or down and copy value
  - ctrl + '+' or '-' or '\'
  - for selecting a number of command column (1st or 2nd) with which a slide effect value option will work
  - the player works faster now (doesn't hang on kickstart 3.0 and lower), but we still strongly recommend you to install a new kickstart 3.1, AHI works 100% faster!
  - added panning envelopes (so... from now there are two realtime effects for instruments)
  - removed bugs from deliplayer and made some improvements
  - added panning slide command Pxx
  - added playing notes from keyboard in envelope window
  - added a set real bpm effect command: Sxx
  - fixed playing patterns which take more than 64kb in memory
-

## Changes in V2.14

- fixed some bugs in Load/Save config
- made a Digi Booster pro deliplayer
- fixed some bugs in Oktalyzer module loader routine :)
- added a dealloc music channels option
- improving requesters
- fixed bug while quitting from the program
- added an autoboot option, so now Digi Booster changes automaticly the volume boost depending on number of channels
- from now LP filter (low pass filter) works in %
- renamed 'cut bass' to 'HPfilter' (higs pass filter) and improved routine, now HPfilter works in %
- improved optimize routine: added possibility to remove unused channels in module and clear unused instruments' names
- fixed bug in showing range in sample editor
- fixed a bug in saving module in DBM format which appeard sometimes when you saved too much volume envelopes and then tryed to load it.
- improved xm converter: converting of commands EAx Axx and volume envelope
- added Master Volume slider
- added Real BPM slider
- added Sample Range slider

## Changes in V2.13

- added a blankzero option
- fixed a bug in selecting AHI audio mode
- removed a bug which caused a 'guru' while a number of channels was changing and music was played at the same time.

## Changes in V2.12

- added lalt + arrow left/right to change number of editing pattern
  - added stop playing a sample with space in sampler
  - added I O P [ ] 9 0 = keys to play sample and edit notes
-

- added some option visible at right side of pattern editor (CUT, COPY, PASTE, FLIP, INSERT POS, DELETE POS PATT/TRACK/BLOCK ALL/COMMANDS)
- added show repeatmarks in sampler while showing a range or zoom in a sample
- fixed bug in ZoomOut option
- added leaving sampler with ESC key
- fixed a bug in DIGI loader - some of left channels were played as right channels and vice versa
- made a faster procedure (we hope...) to print pattern scroll (visible only with GFX cards)
- improving protection :-)
- fixed an editing of command column in pattern editor (thanks Slaxx)

#### Changes in V2.11

- fixed some bugs in allocating music channels and initializing ahi.device
- up to 256 (row skip) in quantize
- added some keyboard options missed in older versions
- added save instrument option; so now you are able to save/load sample together with parameters like: volume envelope, finetune, ping pong loop etc.
- added sample routine (make use of HardDiskRecord by Martin Blom)

#### Changes in V2.10

- added a menu and some keyboard shortcuts see ~Keyboard~
  - fixed a lot of small bugs like:
    - fixed playing of 256 position long patterns
    - fixed editing of commands in pattern editor
    - fixed e6x - loop command
    - fixed dxx pattern break (this command had limitation: you were able to skip to 63th position max. - now it's extended to 99)
    - fixed playing 256 pos long patterns by return key
    - when you change position when module is not played program does not skip to start of pattern now
    - fixed converting 'fade out' in XM's volume envelope
-

- fixed EDx command when an instrument has vol envelope
- when initializing sound there shouldn't be longer any system crashes
- Digi Booster is now more user friendly
- added a second faster procedure to show samples in sampler window (works only with AGA and ECS machines because this is a hack and will not work with graphic cards)
- added highlighting of marked block in editor

#### Changes in V2.01

- Made a loader for patch samples in XM converter and fixed some bugs. So there shouldn't be longer any problems with converting XM modules.
- Fixed some bugs in envelope editor.
- Added a cut bass option in sampler.
- Fixed a bug in volume envelope procedure.
- Added some Pro Tracker keyboard options like:

#### Drumpad

-----

Use \ to toggle modes. One or more dots will appear to the right of the 8bit/16bit mode gadget.

No dots: Normal keypad.

1 dot: Drumpad.

2 dots: Drumpad - Edit/Rec possible.

Use Alt + keypad key to set note. "Select note" text will appear then select a note from keyboard. DIGI Booster will store a pressed note and actual octave.

lalt+o - open module

lalt+s - save module

lalt+l - load sample/instrument

lalt+q - Quit from program

lalt+r - Go to sampler screen

lalt+d - Go to disk op.

lalt+e - Go to edit option

lalt+m - Go to mod info screen

lalt+x - Go to mixer screen

lalt+c - Go to configuration screen

lalt+a - Turn On/Off spectrum analyzer

lalt+v - Go to volume envelope editor

lalt+p - Go to panning envelope editor

lalt+b - Go to boost envelope editor

lalt+f - Go to filter envelope editor

- removed a bug which appeared when samples with ping pong loop were played
- fixed Timer (vbl irq changed to cia 1/50 sec)
- added possibility to turn off/on scopes
- fixed bug in scopes
- fixed bug when allocating audio channels, cia interrupt
- added config
- added Export MOD option; so now you can create 4-32CHN .MOD files; this option will not be available in unregistered version
- added a loader for AIFF 8/16 bit / mono/stereo samples.
- removed a bug in mixer which appeared when you chose a cancel in file requester
- the volume boost in mixer window is showed in %
- fixed a playing notes from keyboard while module is played
- for now the volume envelopes are heard in realtime, it means that when you play notes on keyboard instruments are played with volume envelopes; if you want to turn off the sustain points or envelope loop press key above tab (in edit mode this key also places a key OFF note)
- removed a bug in ECx and Fxx commands; so the F00 should now work fine.
- added unfortunately missed in DB1.x and 2.0 PRO command EDx
- fixed a bug, BTW not mine; when you played samples with very short loops AHI device terrible slowed down; now there is a procedure which makes 1024 bytes buffers (both for ping pong and forward loops) in realtime and then gives it to AHI play :) so there shouldn't be longer any system freezes...
- when saving sample a file name is taken from a instrument's name list

## 1.19 Keyboard shortcuts

Keyboard :  
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note: lalt means left alt  
lshift means left shift  
lamiga means left amiga

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 ;

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Z X C V B N M , . /

F1 - Octave up (there are 7 octaves; from note C-1 to B-7; 84 notes)

F2 - Octave down

lalt+F3 - Cut whole pattern (notes+commands) to buffer

lalt+F4 - Copy whole pattern (notes+commands) to buffer

lalt+F5 - Paste patt-buffer (notes+commands) to pattern

lshift+F3 - Cut track (notes+commands) to buffer

lshift+F4 - Copy track (notes+commands) to buffer

lshift+F5 - Paste track-buffer (notes+commands) to track

ctrl+F3 - Cut commands in track to buffer

ctrl+F4 - Copy commands in track to buffer

ctrl+F5 - Paste cmd-buffer to track

lamiga+F3 - Cut commands in pattern to buffer

lamiga+F4 - Copy commands in pattern to buffer

lamiga+F5 - Paste cmd-buffer to pattern

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

lshift+F6-F10 - Store current patternposition on selected F-key

lalt+F6-F10 - Play pattern from the stored patternposition

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

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

lalt+Return - As above, but with all tracks

lalt+Backspace - As above, but with all tracks

ctrl+Return - Push cmds in track one down

ctrl+Backspace - Drag cmds in track one up

lamiga+Return - Push cmds in pattern one down

lamiga+Backspace - Drag cmds in pattern one up

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

Space - Toggle between Stop/Edit-mode

---

< (beside Z) - All channel's volumes to 0  
 right Amiga - Play Pattern  
 right Shift - Record  
 right Alt - Play Song

Del - Delete note under cursor  
 lalt+Del - Delete command only  
 lshift+Del - Delete note and command

left shift+1 - turn on/off a first visible channel from left  
 left shift+2 - turn on/off a second visible channel from left  
 left shift+3 - turn on/off a third visible channel from left  
 left shift+4 - turn on/off a fourth visible channel from left  
 left shift+5 - turn on/off a fifth visible channel from left  
 left shift+6 - turn on/off a sixth visible channel from left  
 left shift+9 - turn off all channels  
 left shift+0 - turn on all channels

On Numeric pad:

0 - Select instrument \$0  
 1st row - Select instrument \$1-\$4  
 2nd row - Select instrument \$5-\$8  
 3rd row - Select instrument \$9-\$c  
 4th row - Select instrument \$d-\$f  
 Just . - Select instrument \$10

Enter + select instruments \$11-\$1f

lamiga (Plus keys below) - Transposing like in Edit Option

Instrument/Track	Instrument/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  
 lshift+Tab - Move cursor to prev track

NOTE: (-) means that this option is not implemented yet

ctrl+a - Toggle channel on/off

ctrl+b - Mark block



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ctrl+c - Copy notes + commands to buffer  
lalt+ctrl+c - Copy commands only to buffer

ctrl+d - Delete notes + commands, drag notes & commands up  
lalt+ctrl+d - Delete commands, drag commands up

-ctrl+e - expand track

ctrl+f - toggle filter on/off

ctrl+h - Transpose block up

ctrl+i - Insert notes + commands, push notes + commands down  
lalt+ctrl+i - Insert commands, push commands down

ctrl+j - Join-paste notes + commands  
lalt+ctrl+j - Join-paste commands

ctrl+k - Kill to end of track notes + commands  
lalt+ctrl+k - Kill to end of track commands only

ctrl+l - Transpose block down

ctrl+m - Toggle multikeyboard on/off

-ctrl+n - Re-mark last block

-ctrl+o - Contract track

ctrl+p - Paste commands+notes  
lalt+ctrl+p - Paste commands only

ctrl+r - Restore F6-F10 positions

ctrl+t - swap tracks

-ctrl+u - undo last change

ctrl+x - Cut notes + commands to buffer  
lalt+ctrl+x - Cut commands to buffer

ctrl+y - Backwards notes+commands  
lalt+ctrl+y - Backwards commands only

lalt+o - open module  
lalt+s - save module  
lalt+l - load sample/instrument

lalt+q - Quit from program  
lalt+r - Go to sampler screen  
lalt+d - Go to disk op.  
lalt+e - Go to edit option  
lalt+m - Go to mod info screen  
lalt+x - Go to mixer screen  
lalt+c - Go to configuration screen  
lalt+a - Turn On/Off spectrum analyzer

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lalt+v - Go to volume envelope editor  
 lalt+p - Go to panning envelope editor  
 lalt+b - Go to boost envelope editor  
 lalt+f - Go to filter envelope editor

Return - Step one note forward  
 Backspc- Step one note backward

cursor up/down - change position of cursor  
 lshift+cursor up/down - change position of cursor (faster)  
 lalt+cursor up/down - change position of cursor (fastest)

ctrl+arrows right - instrument up  
 ctrl+arrows left - instrument down  
 lalt+cursor right - patternnumber up  
 lalt+cursor left - patternnumber down  
 lshift + cursor right - song-position up  
 lshift + cursor left - song-position down

Drumpad

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Use \ to toggle modes. One or more dots will appear to the right of the 8bit/16bit mode gadget.

No dots: Normal keypad.  
 1 dot: Drumpad.  
 2 dots: Drumpad - Edit/Rec possible.

Use lalt + keypad key to set note. "Select note" text will appear then select a note from keyboard. DIGI Booster will store a pressed note and actual octave.

## 1.20 some infos about sampler...

About Sampler:

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If you want to sample some sound, copy file HardDiskRecord to C: directory. You can find it in AhiDev.lha archive:

"Developer/Examples/Low-level/HardDiskRecord"  
 or in our archive in C: directory

## 1.21 Some infos about envelope editor...

Envelope Editor v1.0:

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An instrument's volume or panning may be defined by it's envelope curve. An envelope curve consists of envelope points (in Digi Booster

max. number of points is 32, max. number of sustain points is 2 and max. number of loops is 1).

Each envelope point has two informations. The vertical position of point corresponds to volume value (the range is: 0-64) - (in panning envelope window corresponds to panning value ; range -127 to 128). Horizontal position corresponds to a time (The range is: 0-350 ticks ; 0-6 seconds).

One pixel in the envelope window corresponds to one player-tick. If the BPM is 125, you'll consume 50 pixel/second. The window's "size" is about 6 seconds.

If the instrument has a sustain point, the envelope will stop at the that point until a key-off note has been played. If instrument has two sustain points the envelope will stop two times (it means you have to play a key-off note two times). Envelope loop works in the same way (to turn off loop you have to play a key off note).

The volume envelope window is the same like panning envelope, only one difference is a special new parameter in panning envelope window. It's a GENERAL PAN. This parameter sets the general position in channel (-127 far left and 128 far right).

Example:

If you have a panning envelope which starts at down of the window and ends at far up the sound will slide from left to right. Horizontal position of first point is 0 (BTW horizontal pos of 1st point is always 0). The time of slide from left to right is defined by horizontal position of second point.

If you want to use panning envelope you must set audio mode with stereo++ in AudioModeConfig !!!

## 1.22 some infos about protection...

Protection:

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WARNING!!!

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Digi Booster Pro is protected in a special way:

If we will get cracked version of our program or installer we will know who cracked DBpro or give it to someone who did it and you will take the criminal consequences of this !!!

Also if you are using cracked version, we aren't responsible for any damages made by our program !!!

## 1.23 Some problems with protection

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Some problems:

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If Digi Booster Pro (registered version) quits after 5 minutes. It means that you have broken some rules (read below) & you must to install it once again. Sorry for it but it's caused by our protection.

Here follows text taken directly from the last page of DBpro installer.

There are some rules after installing Digi Booster on HD:

- you can't rename file Digi Booster !!!
- you can't rename dir where Digi Booster was installed !!!
- you can't copy Digi Booster because it won't be run !!!

If you won't treat this rules serious Digi Booster Pro will always quits after some time !!!

## 1.24 Benchmarks

Benchmarks

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MC030/50MHZ

Kick 3.1, freq 44khz, ahi.device 4.164

Paula Fast 14 bit mono calibrated = 30 chn  
Paula Fast 14 bit stereo calibrated = 25 chn  
Paula Fast 14 bit stereo++ calibrated = 20 chn

MC030/50MHZ

Kick 3.0, freq 44khz

Paula Fast 14 bit mono calibrated = 27 chn  
Paula Fast 14 bit stereo calibrated = 22 chn  
Paula Fast 14 bit stereo++ calibrated = 18 chn

Tester: Tap&Walt

digi@kki.net.pl

-----  
MC060/50MHZ with CyberGfx Screen

Kick 3.0, freq 44khz

toccata mono cpu = 86 chn  
toccata mono tables = 82 chn  
toccata stereo++ cpu = 50 chn

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```
toccata stereo++ tables = 48 chn  
toccata stereo cpu      = 68 chn  
toccata stere tables    = 54 chn
```

Tester: Claus Morell

CMORELL@VOSSNET.DE / <http://user.vossnet.de/cmored>  
or call my BBS : MAGIC GALAXY BBS / +49 (0)40 612 617

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