

n-Track

a Digital multitrack
recorder

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For Creative Sound Blaster owners

For Sound Blaster owners:

clicking the right mouse button on the creative mixer and then selecting "Input-output settings", will allow you to set the mic and line-in gain roughly (*1, *2, *4).

Make sure you have enabled the driver's full duplex support and that you have disabled the stereo enhancement feature.

When operating in full duplex, the sound quality you'll hear while recording will be very poor.

In fact the 16 bit audio samples are truncated by the SB's driver to 8 bit. ***This is not a program's fault, but a limitation of the hardware:***

*the **Sound Blaster hardware** can use only one 16 bit and one 8 bit DMA channel at a time, so either the recorded data will be 8 bit (even if the actual format is 16 bit) or the same will happen to the data being played. I've obviously chosen to make the playing tracks sound worse so the recorded one will be effectively 16 bit.*

So when playing back all the tracks without recording the audio quality will not be penalized.

After having checked the recording level, remember to turn off the creative mixer's vumeters: if you don't you'll get enormous lag times.

Credits

Thanks to:

Alessandro De Murtas and Richard Fairthorne for their help in beta-testing.

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Tracks formats, mono & stereo playback:

Tracks can be either mono or stereo: the pan slider will simply act as a balance control for the stereo tracks while it will actually pan to the left or to the right the mono tracks. Playback will always be in stereo, but it's possible to disable stereo playback while recording other tracks: in fact many soundcard are capable of full-duplex operation only when used in mono mode. If you get messages such as "waveOutOpen(): udefined error" try to enable the option "mono playback while recording" in the preferences dialog.

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Obtaining new versions:

New versions of the program can be found at the following URLs:

<http://www.simtel.net/pub/simtelnet/win95/sound/ntrck096.zip>

<ftp://ftp.simtel.net/pub/simtelnet/win95/sound/ntrck096.zip>

or at any simtel mirror (/pub/simtelnet/win95/sound/ntrckxxx.zip). ("xxx" stands for version number i.e. 096).

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Working with n-Track:

Working with nTrack is easy: to start a new song, record the first track (usually the rithm base).

Once you have finished click on the stop button.

You will notice that the filename of the track you've just recorded will appear on the list box. Select it and adjust the volume and pan settings (you can do so while listening to the track). Now you are ready to add a new track: click again on the record button, make sure you are ready to play and click on the OK button.

While you are recording, notice the value that will appear near the "lag" writing on the window. Once you have finished recording the track, write this value in the preferences dialog box (accessible via the Options menu).

This values represents the shift that occurs between the recorded track and the ones being played. If this value is < 0 , write it positive in the preferences. When playing back, the program will shift all the tracks by this value against the first track. So always check that the first track (the upper one) that appears in the list box, is the first one that you have recorded. Anyway this is not a critical factor, because the lag value usually is some hundreds. To obtain the actual shift divide this value by the sampling frequency (typically 44100 hz).

If the lag value oscillates too widely, it means that there is some problem and that the program may not work properly.

Once you have finished your song save it via the File menu.

The .sng file that the program will create will contain the mixing information and the compensation value.

When recording, make sure that the recording level is adeguate:

use a mixer to adjust the levels (creative mixer contains also a spectrum analyzer and a vu meter so you can verify if the levels are correct). If the rec level is too high you will notice distortion, while if the rec level is too low, the signal-to-noise ratio will be low.

If the overall volume level is too low you can boost the volume of all tracks by using the boost slider, but always check that in the moments when the song is louder this boost doesn't introduce distortion.

Writing in the "MIDI file" edit box the filename of a midi file, this will be played back in sync with all the other wav tracks.

Make sure that you have selected the desired MIDI output device in the Multimedia/Midi sheet of the control panel.



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Knows bugs

Known Bugs:

This program is in beta: I have tested it only on a SB32 and an AWE32 both Plug And Play. The only sample format is 16 bit. The 48000 Hz sampling frequency is not tested at all. Sometimes the left and right channel swap while playing. Don't know if it's a problem of the program or of the sound card driver.

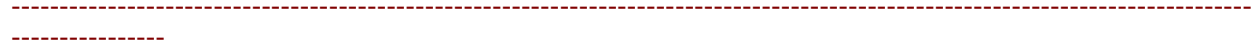
If you get messages such as "waveOutOpen(): ndefined error" try to enable the option "[mono playback while recording](#)" in the preferences dialog.

Bug reports, as well as any kind of suggestions and comments are welcomed.

Feedback

Any comments, bug reports, suggestions, are welcome:
Send email to flaps@mbox.vol.it.

[Credits](#)



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Introduction

n-Track: *A digital multitrack recorder.*

Version 0.96 BETA.

(c) 1996 Flavio Antonioli (flaps@mbox.vol.it).

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Shareware version. Freely distributable.

This program is shareware. It is not free.
See below for instructions on how to register.

Welcome to n-Track.

This program will turn your computer in to a powerful multitrack recorder:
All you need is a full duplex soundcard, Windows 95, a microphone and some free space on your hard drive.

There are no limitations on what you can realize with this program:
the most powerful feature is that the tracks (wave files) aren't mixed together in a single wave file and then played. The mixing process is done "on the fly": in this way you can alter the volume and pan settings while listening to your song or even while recording.

Compose or record a MIDI file and use it as a base while recording the other tracks.
You can also use your favourite wave editor (for example Goldwave) to add some effects on a particular track: you won't have no more the need of sophisticated and very expensive multieffects devices.
You can add reverb, delay, chorus, flanging etc. via software, listen to the overall result, restore the original track (having made a backup copy before modifying it), make some other changes etc.

The program has no theoretical limitations on the number of tracks:
with my Pentium 100, 32 megabytes of RAM and a quite slow hard drive, I can easily work with 6 tracks.

To install n-Track: create a new directory, unzip the archive you've downloaded in it and create a new shortcut on your Start Menu to the file n-Track.exe.



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n tracks!

The "n" in the name n-Track stands for the number of tracks that the program can handle: substitute n with any integer number ranging from 0 to infinity!

In fact the number of tracks is limited only by the speed of the computer.

With a medium configuration Pentium-100 PC it's comfortable to work with as much as 6 tracks!

There are only 4 volume and pan sliders only for convenience: to work with other tracks, simply record them and to adjust their volume and pan settings, click on their names and use the sliders near the list-box.

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Registering Information

Registered users will get a free upgrade to the future versions of the program, the program disk, technical support.

You can become a registered user of this program by drawing 15\$ on this bank account:

Account number 3354965/01/53
Agenzia n.34
BANCA COMMERCIALE ITALIANA

Or you can also send a check to the address below.

When you'll have done the payment or if you have some trouble making it, contact me via email at flaps@mbox.vol.it, or via snail mail at this address:

Flavio Antonioli,
Via Focilide 44,
00125 Rome,
Italy.

HelpScribble

HelpScribble is a help authoring tool written by Jan Goyvaerts. This help file was created with the unregistered version of HelpScribble, which is why you can read this ad. Once the author of this help file is so honest to register the shareware he uses, you will not see this ad again in his help files.

HelpScribble is a stand-alone help authoring tool. It does *not* require an expensive word processor. (Only a help compiler as Microsoft likes keeping the .hlp format secret. Not my fault.)

Here are some of HelpScribble's features:

- The Setup program will *properly* install and uninstall HelpScribble and all of its components, including registry keys.
- Create, edit and navigate through topics right in the main window. No need to mess with heaps of dialog boxes.
- All topics are listed in a grid in the main window so you won't lose track in big help projects. You can even set bookmarks.
- Use the built-in Browse Sequence Editor to easily create browse sequences.
- Use the built-in Window Editor to change the look of your help window and create secondary windows.
- Use the built-in Contents Editor to create Windows 95-style contents files. Works *a lot* better than Microsoft's HCW.
- No need to mess with Microsoft's SHED: use the built-in SHG Editor to create hotspot bitmaps. Draw your hotspots on the bitmap and pick the topic to link to from the list.
- With the built-in Macro Editor you can easily compose WinHelp macros whenever needed. It will tell you what the correct parameters are and provide information on them.
- If you have a problem, just consult the online help. The help file was completely created with HelpScribble, of course.
- HelpScribble is shareware. However, the unregistered version is *not* crippled in any way. It will only add a small note to your help topics to encourage you to be honest and to register the shareware you use.

These options are very interesting for Delphi developers:

- If you are a component writer, use the Delphi Parser to build an outline help file for your component. Just fill in the spaces and you are done. (Try it if you do not believe me or just look at the help file you are reading now.)
- If you are an application writer, HelpScribble provides you with a property editor for the HelpContext property. You can select the topic you need from a list of topic titles or simply instruct to create a new topic. No need to remember obscure numbers.
- The property editor also provides a tree view of all the components on your form and their HelpContext properties. This works very intuitively. (Much nicer than those help tools that simply mess with your .dfm files.)
- HelpScribble can perform syntax highlighting on any Delphi source code in your help file.

HelpScribble is shareware, so feel free to grab your copy today from my web site at <http://www.tornado.be/~johnfg/>

