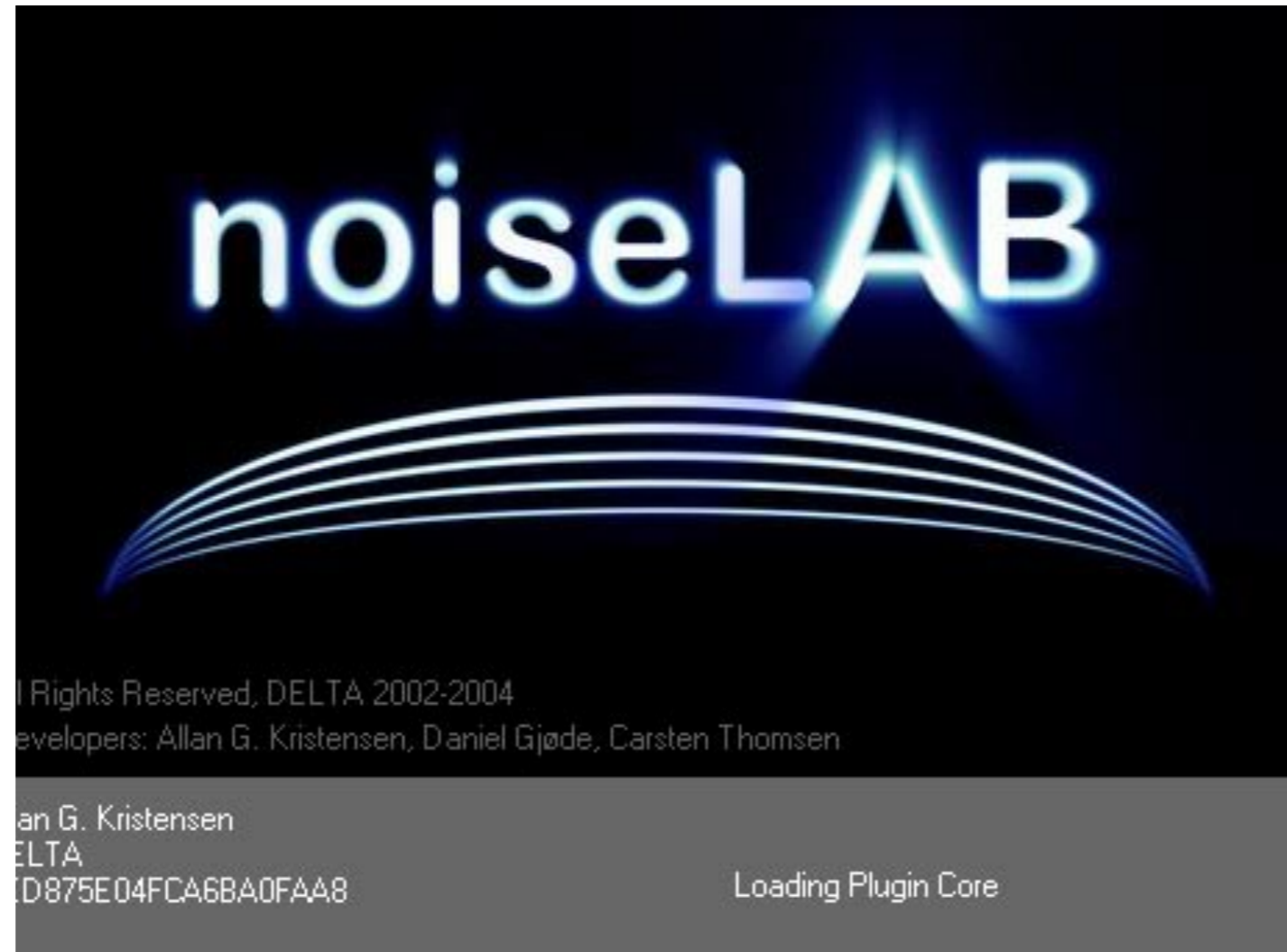
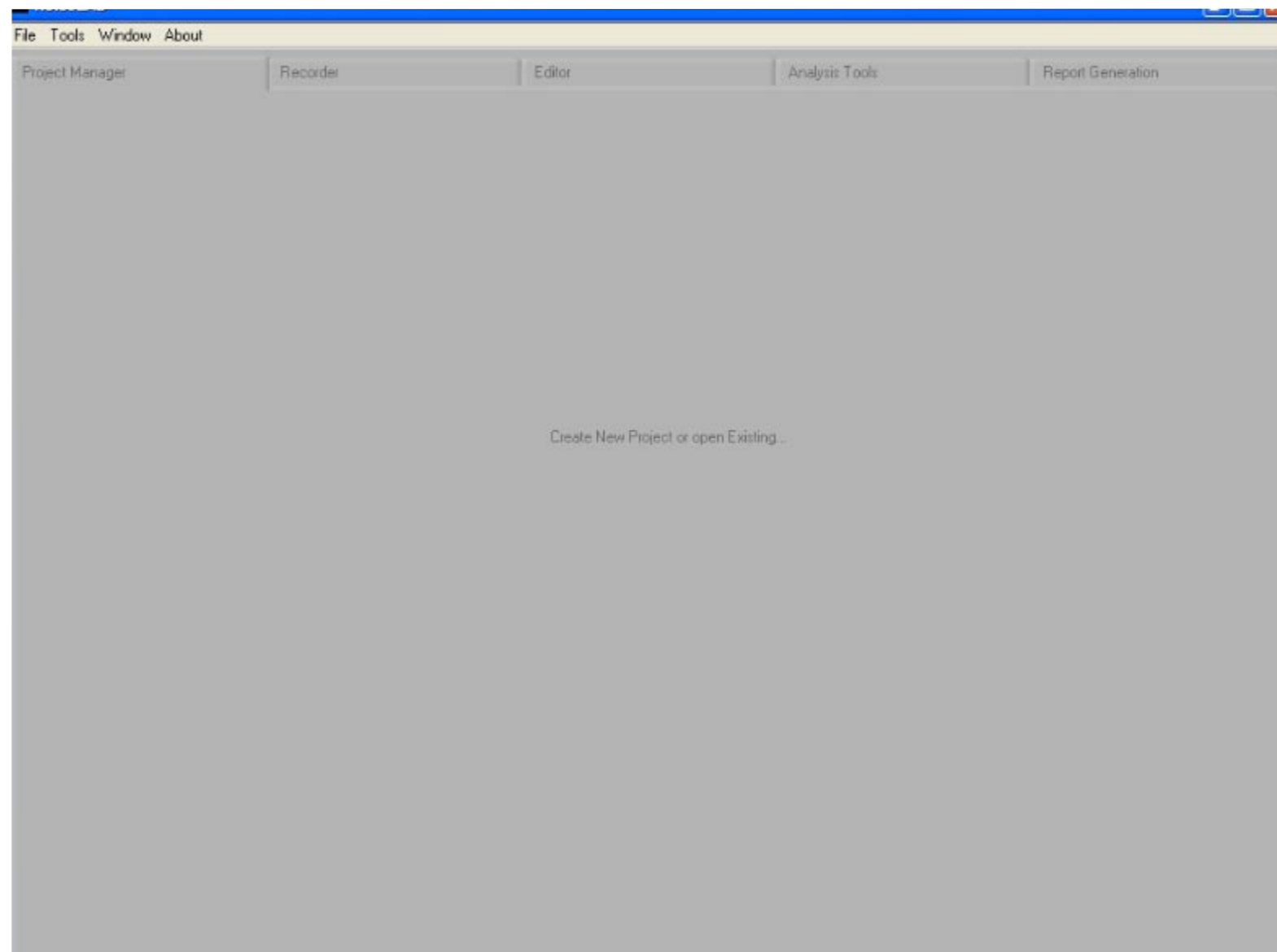
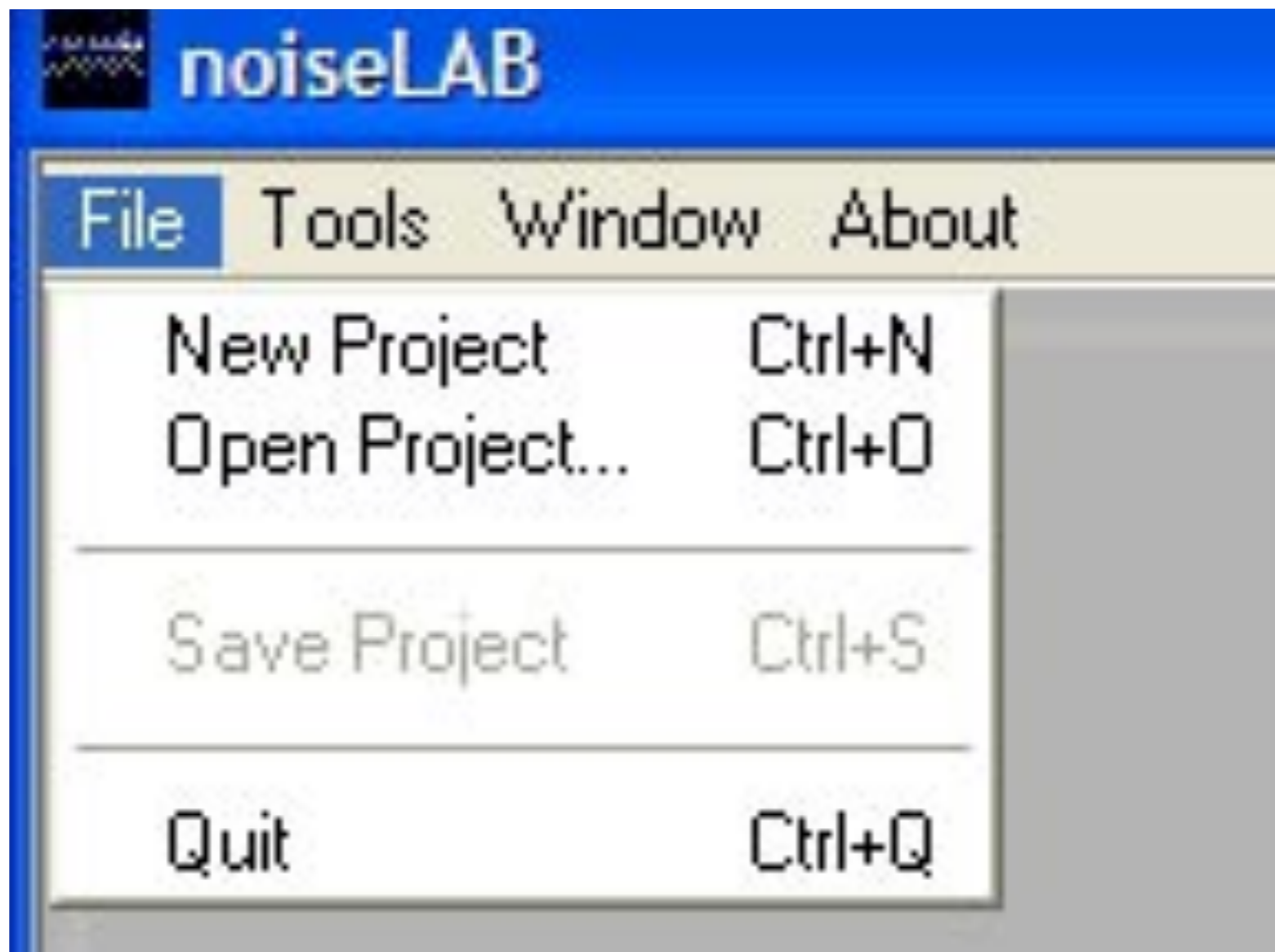


noiseLAB Product Tour

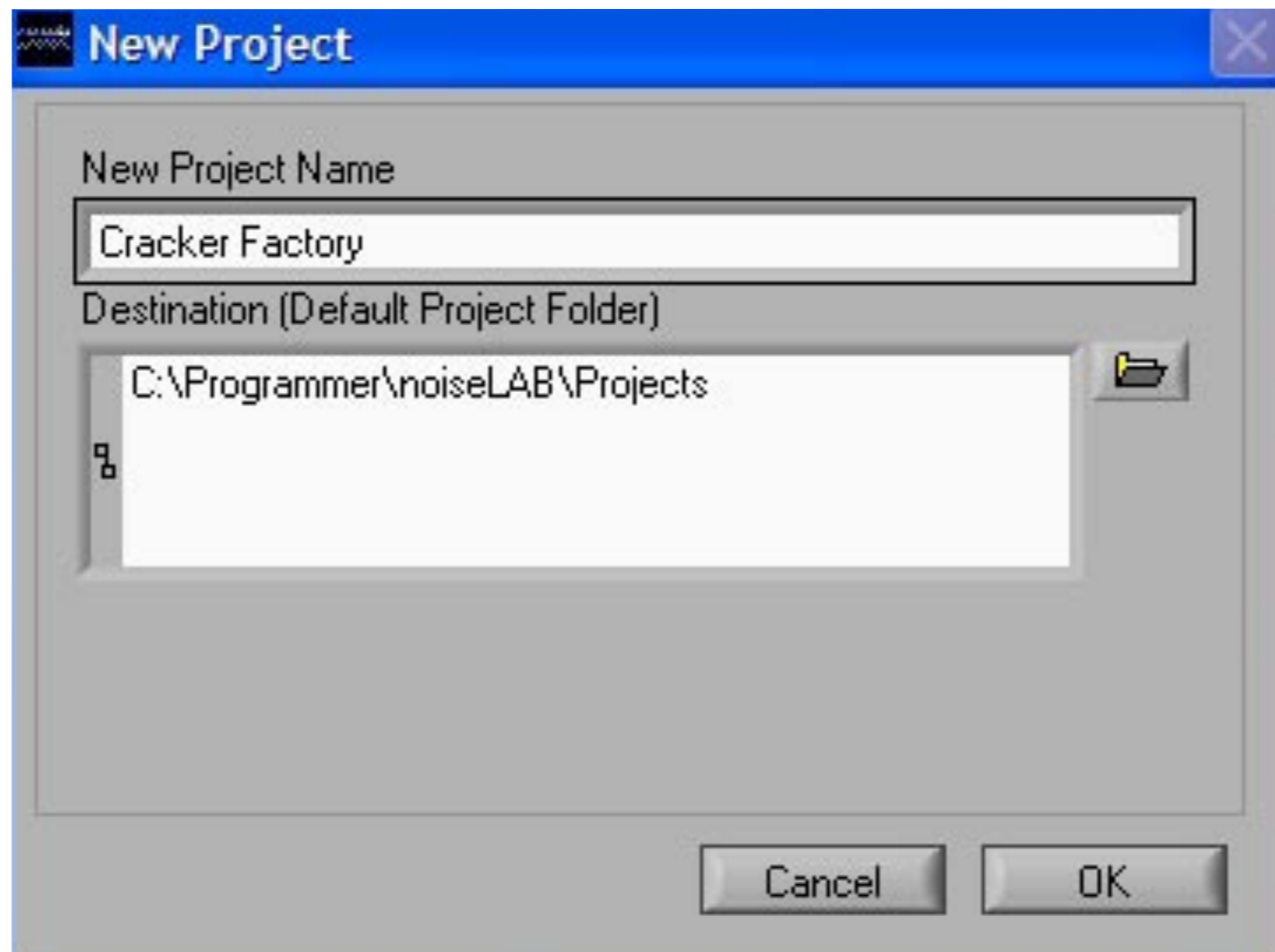




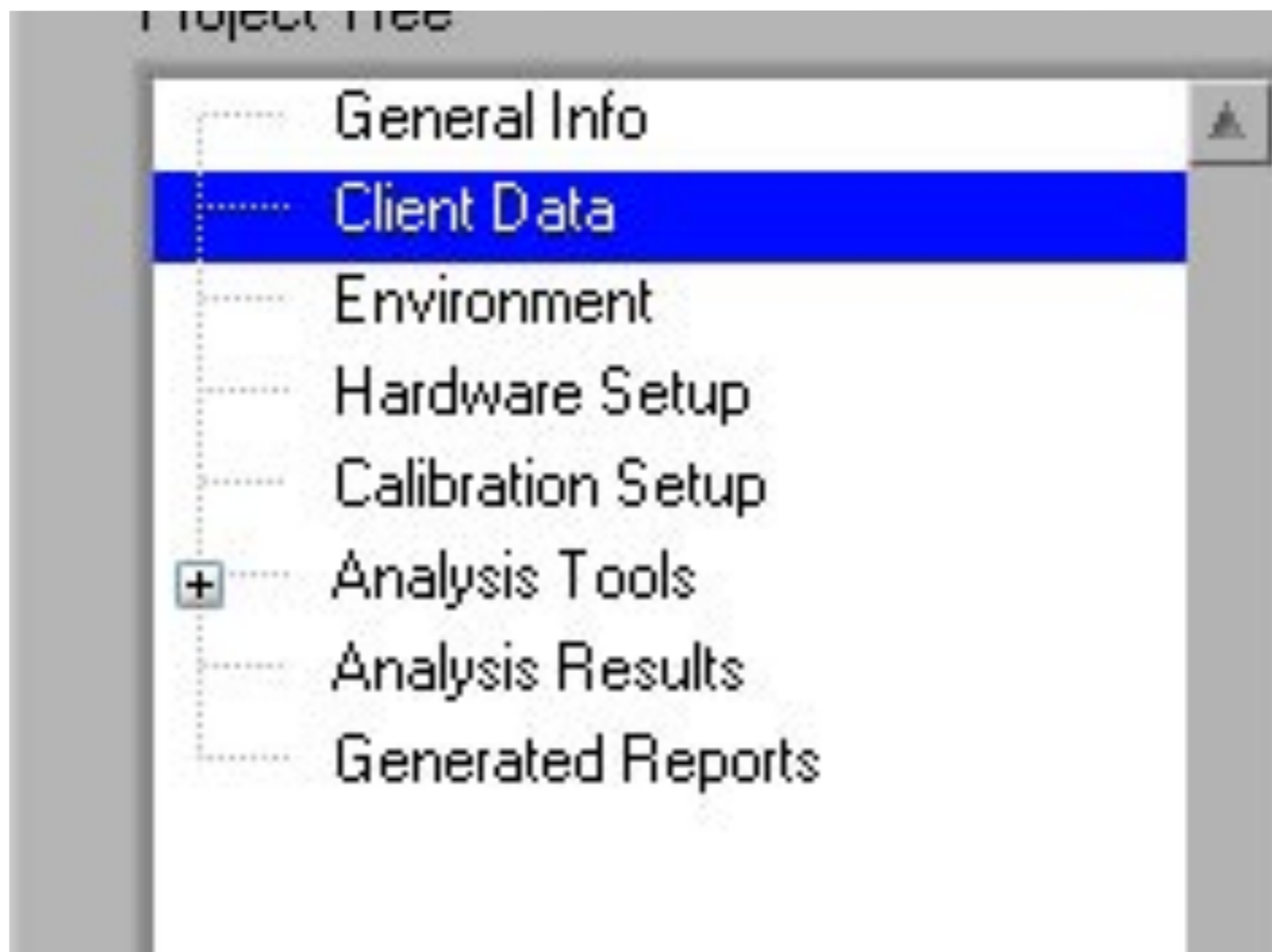
Five main functions make noiseLAB Simple



Start by creating a New Project



and give it a meaningful name



The Project Tree gives you a great overview

Client Data

Company: Cracker Factory

First Name: John

Last Name: Melanchi

First enter all relevant data . . .

osition 1

mounted 2 m above terrain pont 160 degrees

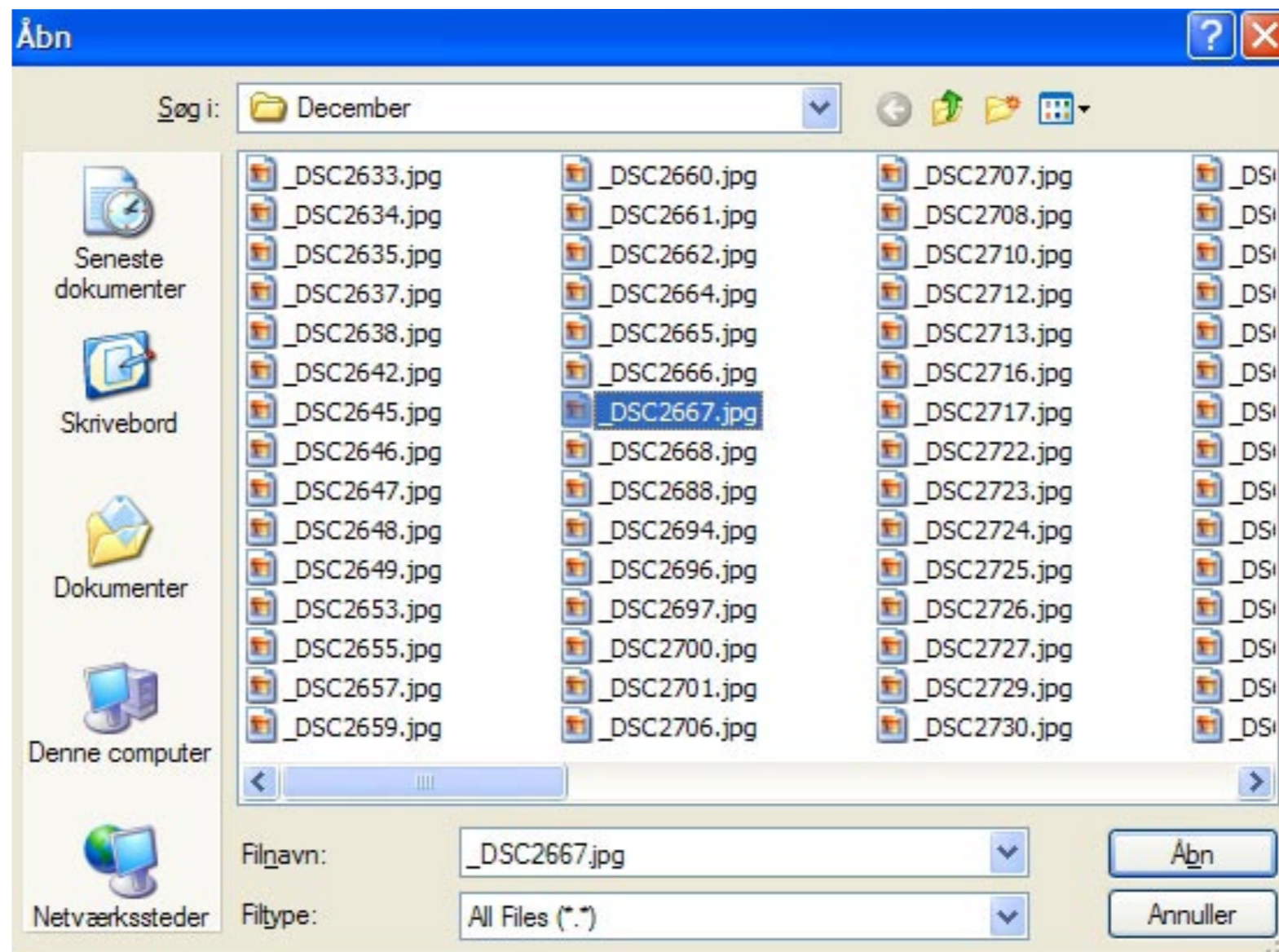
deg. Celsius

Wind Speed: m/

%

Wind Direction: De

including weather conditions, plus free comment fields



and Digital Photos of the site

Select Input Device

SoundCard

SoundCard Setup

Channel Setup

Sampling Frequency: 44.1 kHz

Resolution: 16 Bit

Active Channels

2 Channels

Channel Names

Channel 1: Close in

Channel 2: Far Mic

Now you select your hardware and name the Channels

Project Manager

Record

Project Tree

- General Info
- Client Data
- Environment
- Hardware Setup
- Calibration Setup**
- + Analysis Tools
- Analysis Results
- Generated Reports

and Select Calibration

Additional Information

Microphone

Name:

Type:

S/N:

Calibrator

Name:

Type:

S/N:

Level: dB SPL

Freq.: Hz

External Settings

PreGain: dB

Tell noiseLAB about the microphone and calibrator

Pre Calibration

Calibration Setup

Input Values

Input Level:



Sensitivity:

NaN Steps/

Frequency:

436.33 Hz

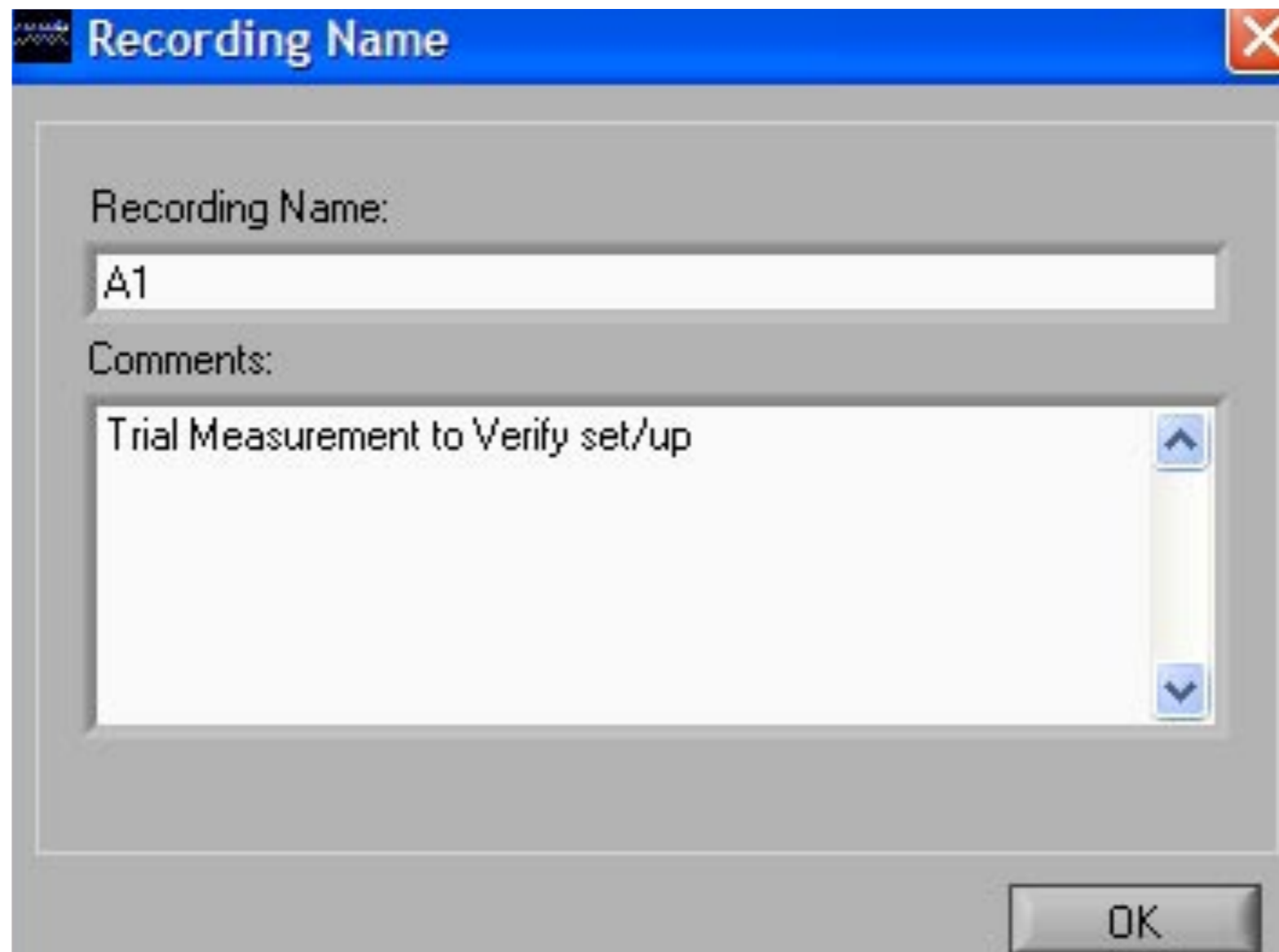
Calibration Tone Detected?



and it will automatically search for and grab the cal tone



Now on to Phase 2: Recorder



The image shows a software dialog box titled "Recording Name". It features a blue title bar with a close button (X) in the top right corner. The main area is light gray and contains two input fields. The first is a text box labeled "Recording Name:" containing the text "A1". The second is a larger text area labeled "Comments:" containing the text "Trial Measurement to Verify set/up". This text area has a vertical scrollbar on its right side. At the bottom right of the dialog is an "OK" button.

Recording Name

Recording Name:

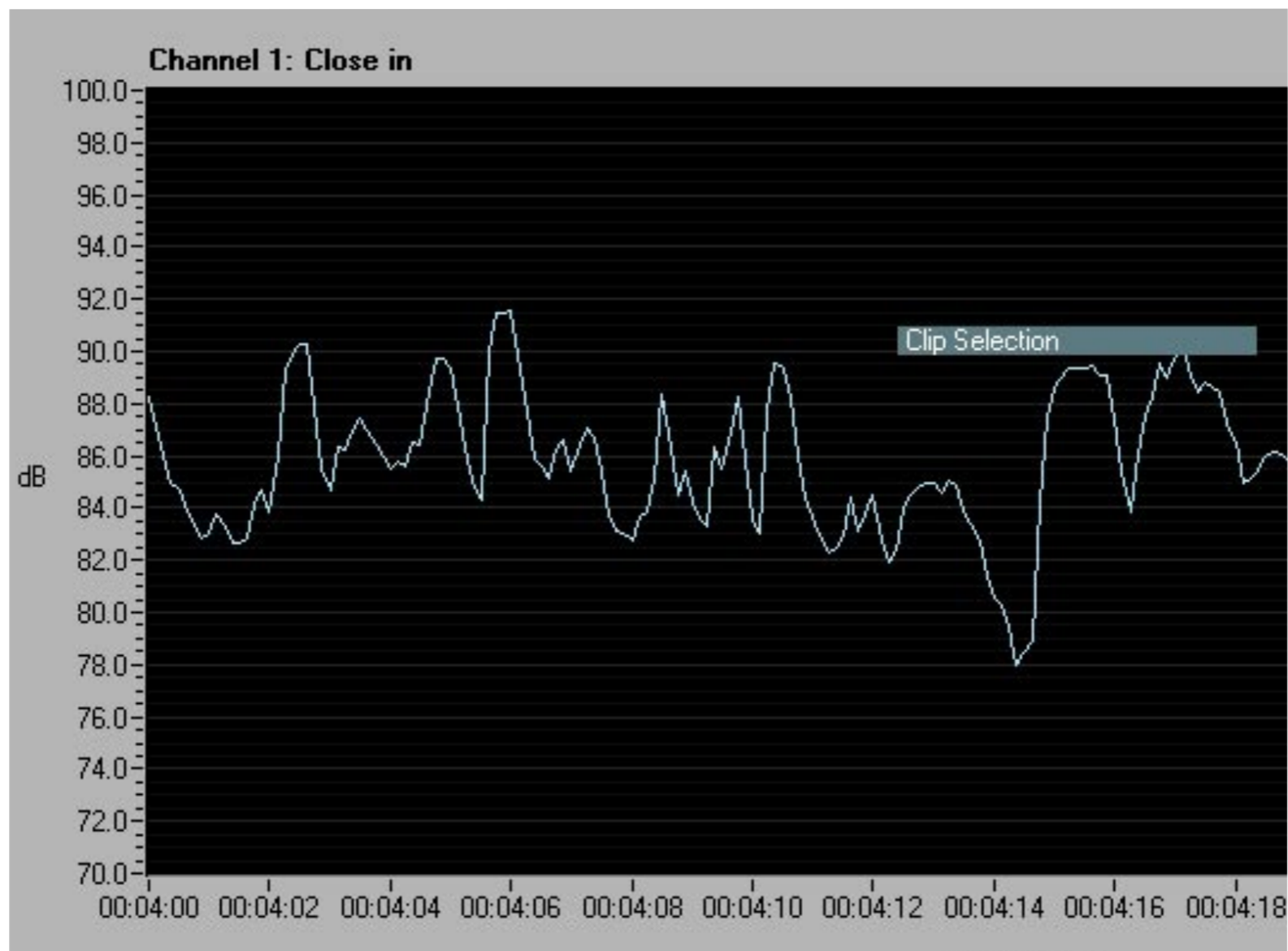
A1

Comments:

Trial Measurement to Verify set/up

OK

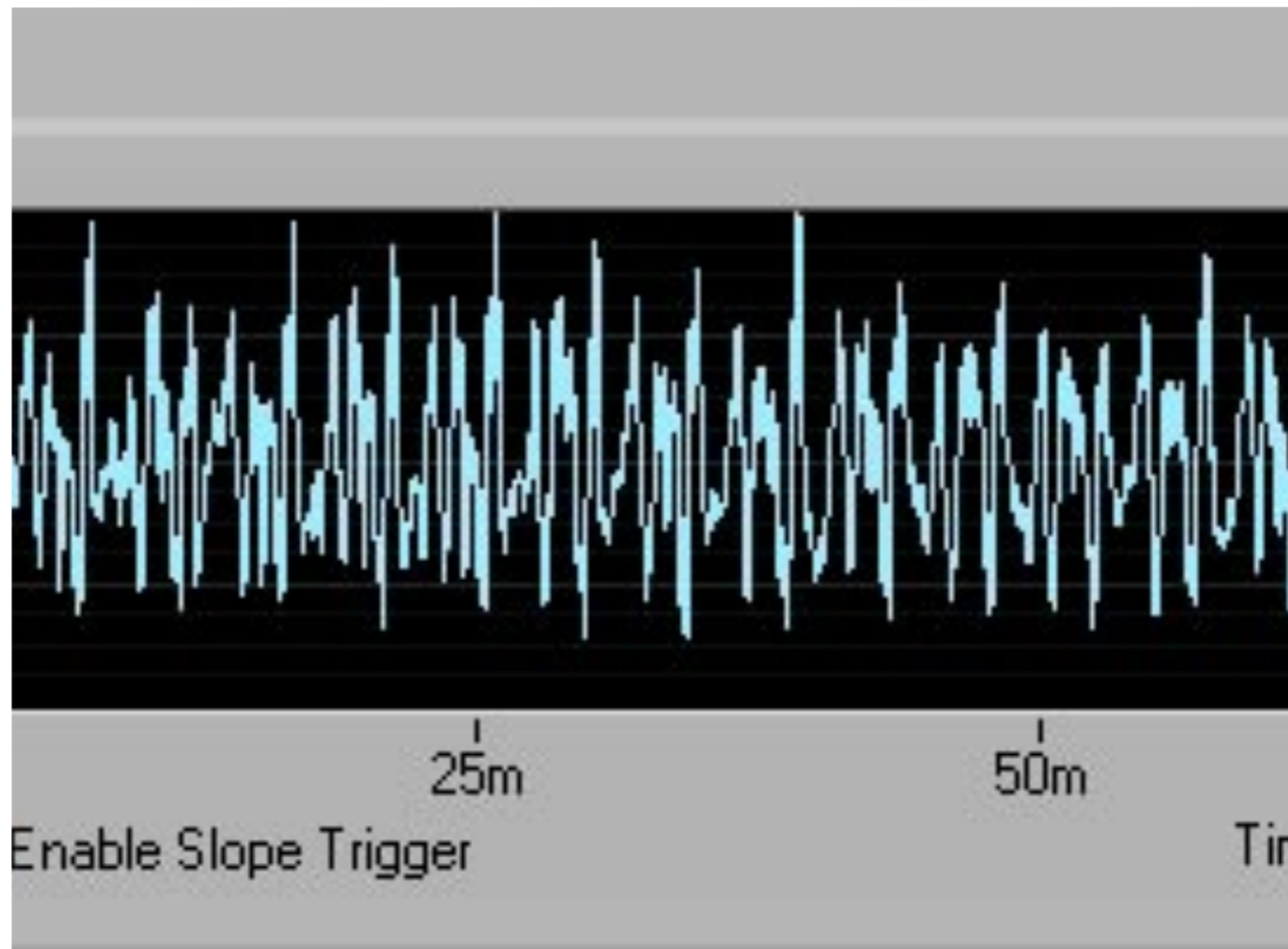
noiseLAB prompts to Name the Recording



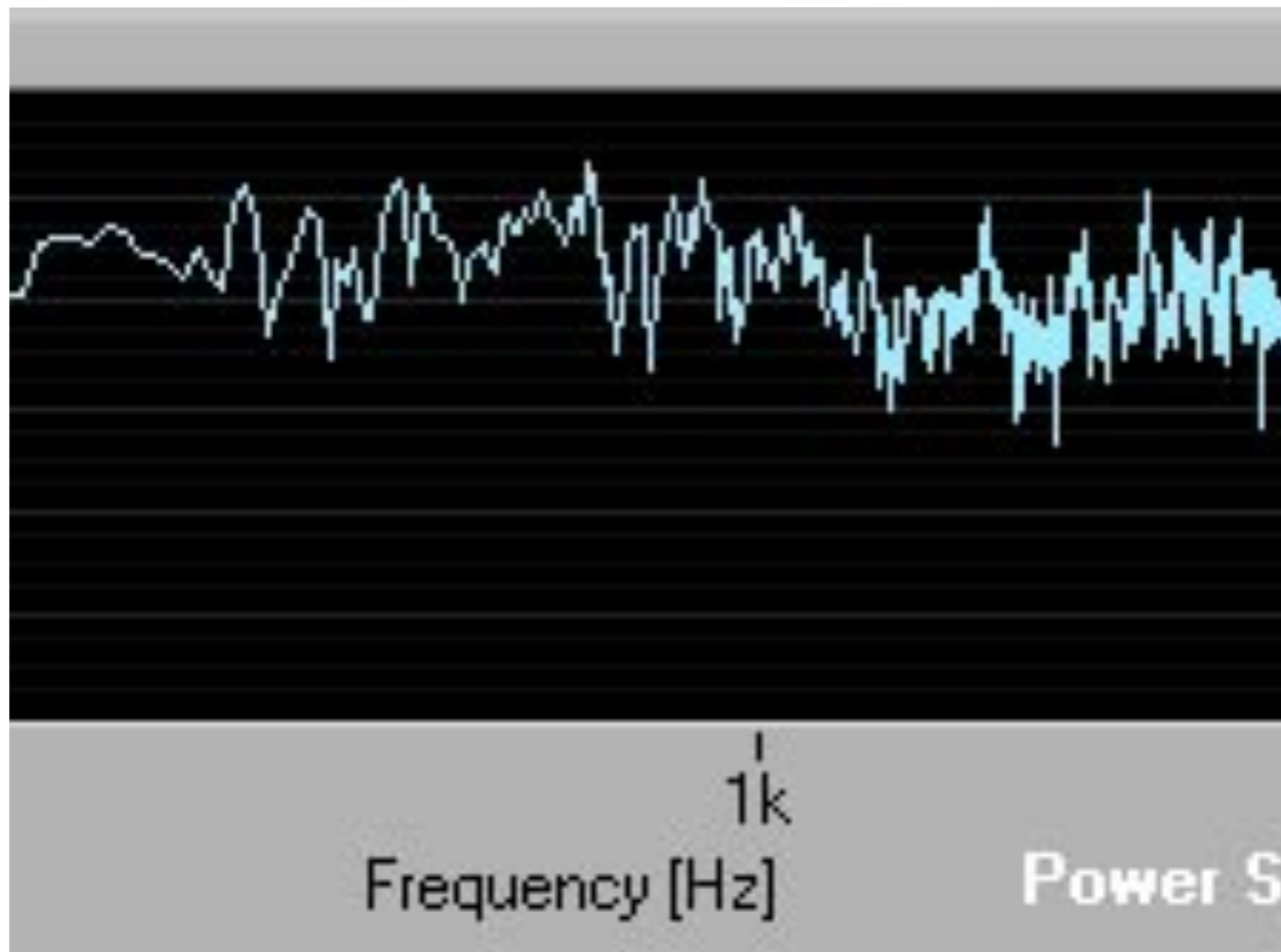
"Click and Drag" to create Clips while recording

The image shows a software dialog box titled "Marker Name". It features a blue header bar with the title and a close button. Below the header, there are four buttons arranged in a 2x2 grid: "Car (F9)", "Plane (F10)", "Dog (F11)", and "Bird (F12)". Below these buttons is a text input field labeled "Custom:". At the bottom of the dialog, there are two buttons: "Cancel" and "OK".

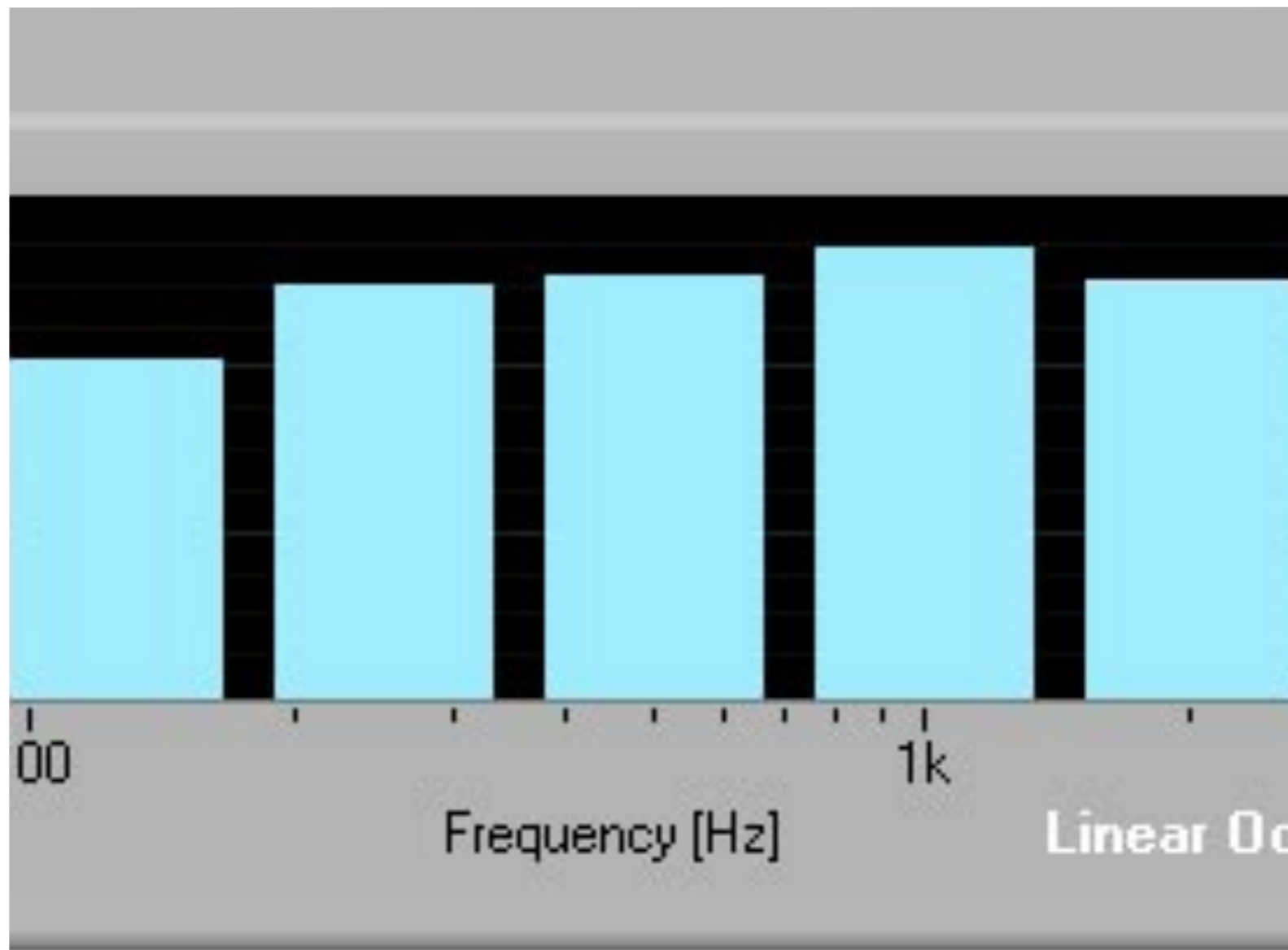
While Recording, Add markers for special events



Probe the signal while recording: Oscilloscope



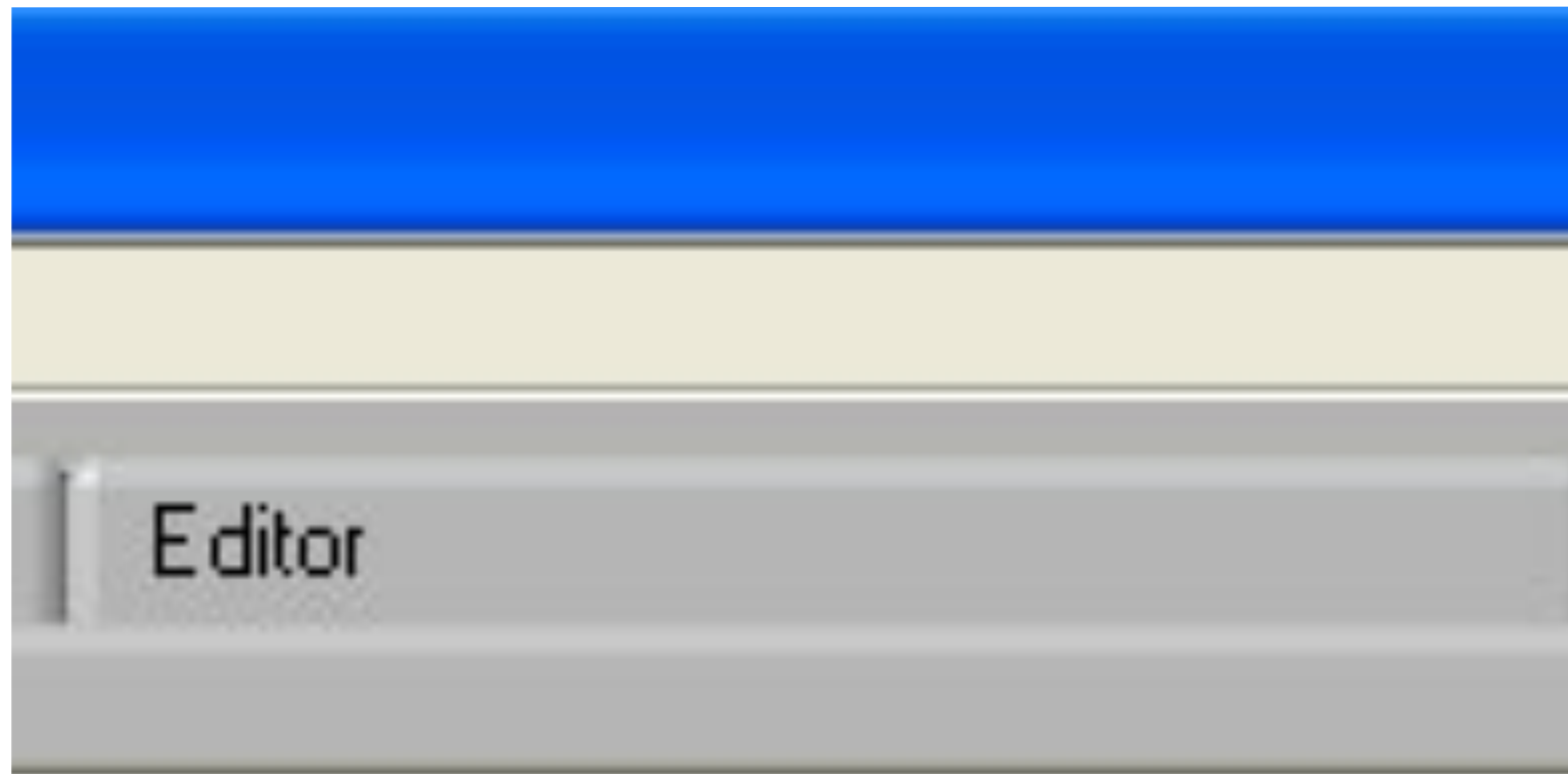
... FFT Spectrum Analyzer



or Octave Analysis . . . all while recording



Listen in headphones via a cool mixing console



Now the 3rd Phase: Editor

✓ (Select Recording...)

(00:00:22:125)

A1 (00:05:56:125)

#	Marker Name	Position	

Select your recording

A1 (00:05:56:125) ▾

Channel 1 ▾

#	Marker Name	Position
000000	Car	00:05:12:314

Go To Marker

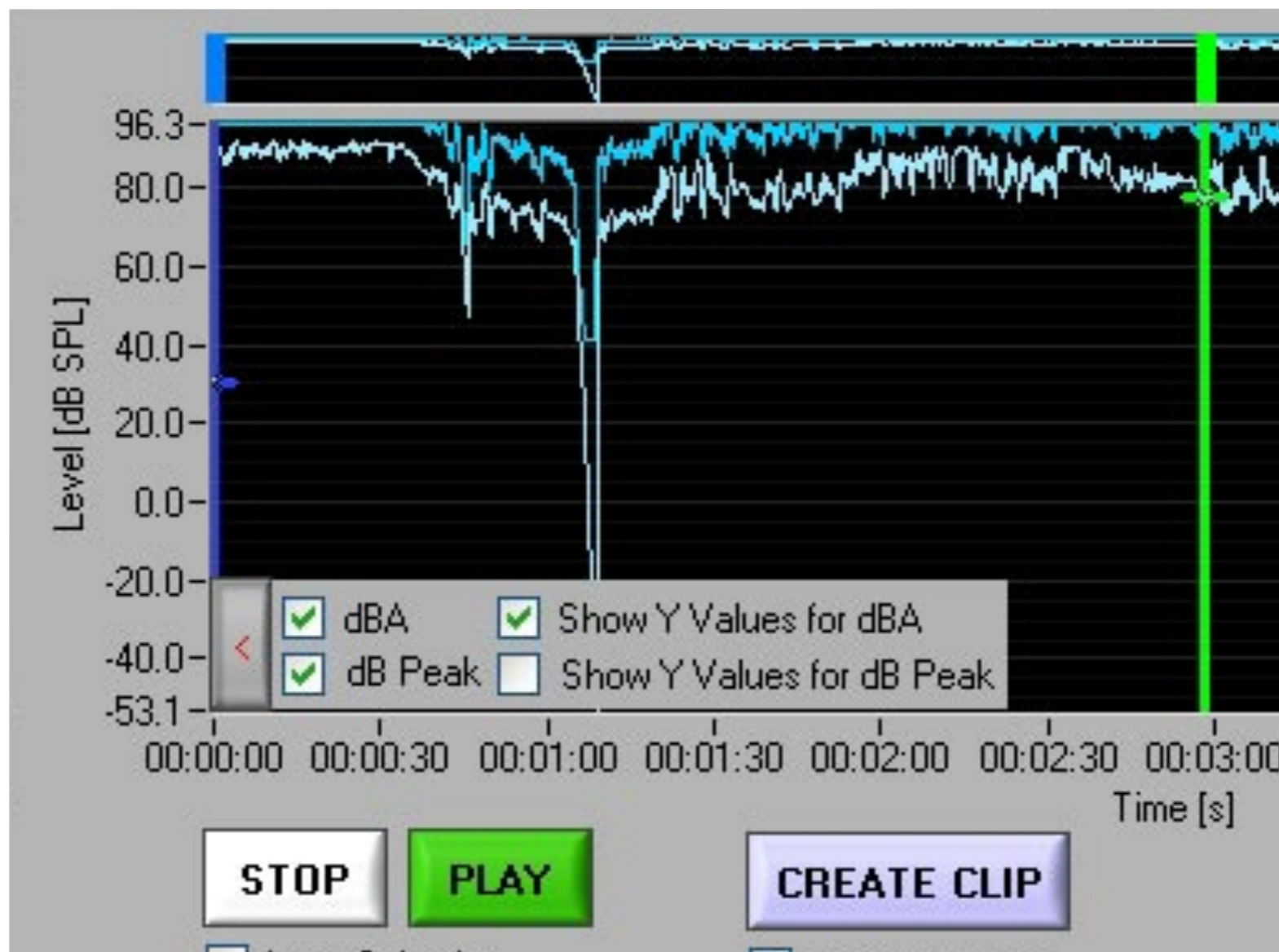
Recording Details

Recording Name: A1

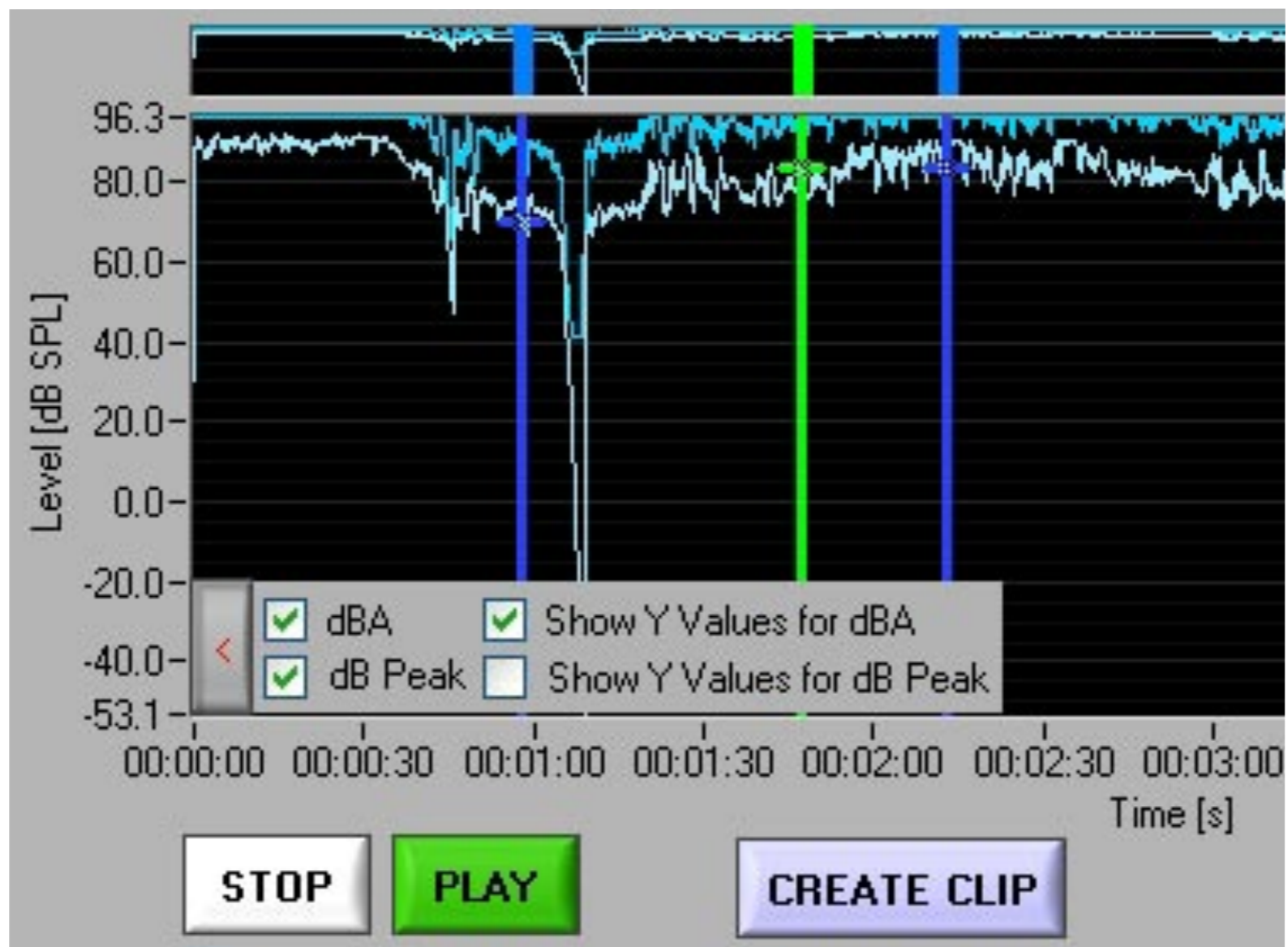
Comments: Trial Measurement to Verify set/
up

Recording Begin: 23 Dec 2004 @ 08:00:10

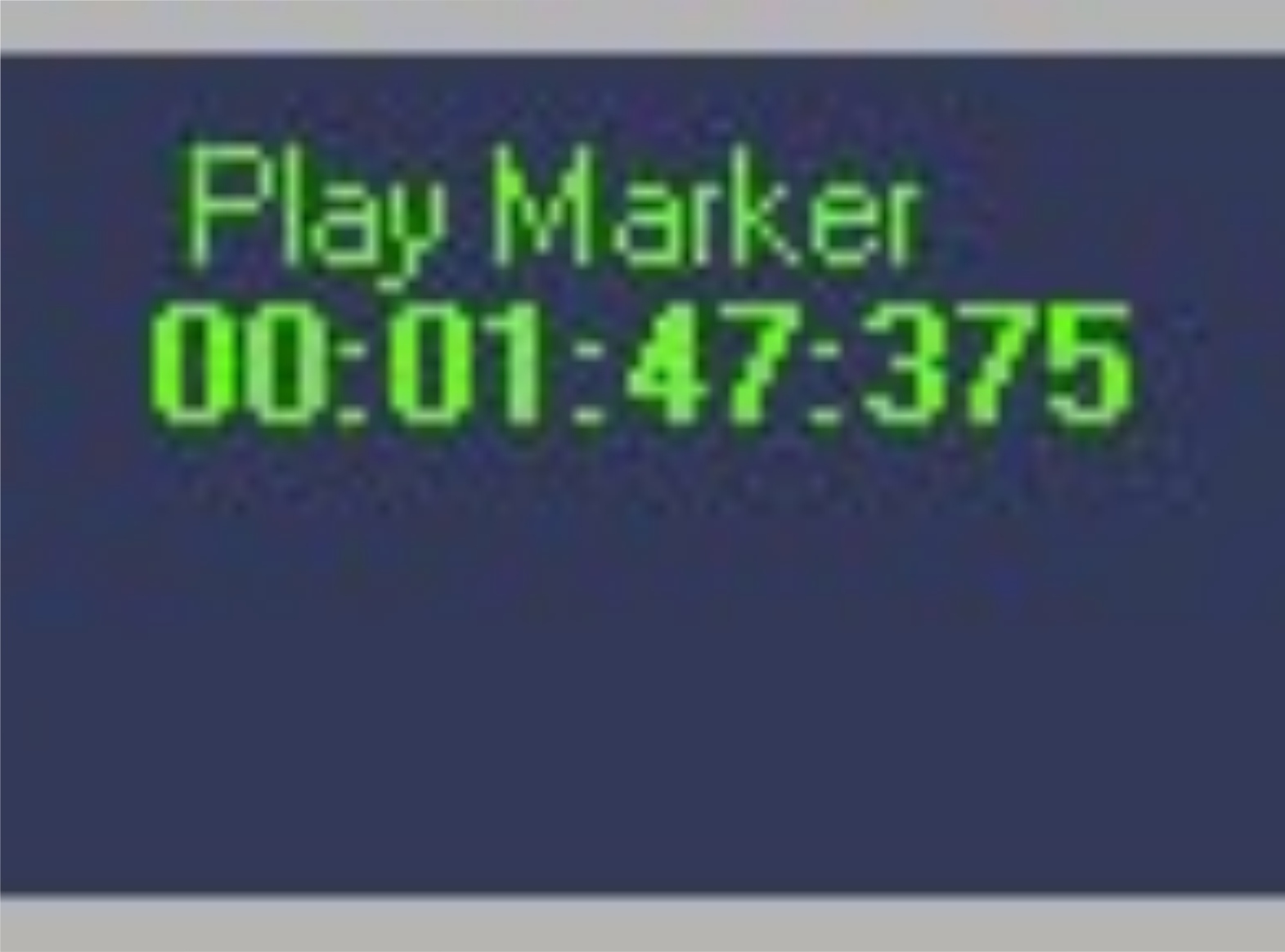
*and note the previously
created Marker is there*



Choose what you want to see



Edit your clips with the Blue Cursors

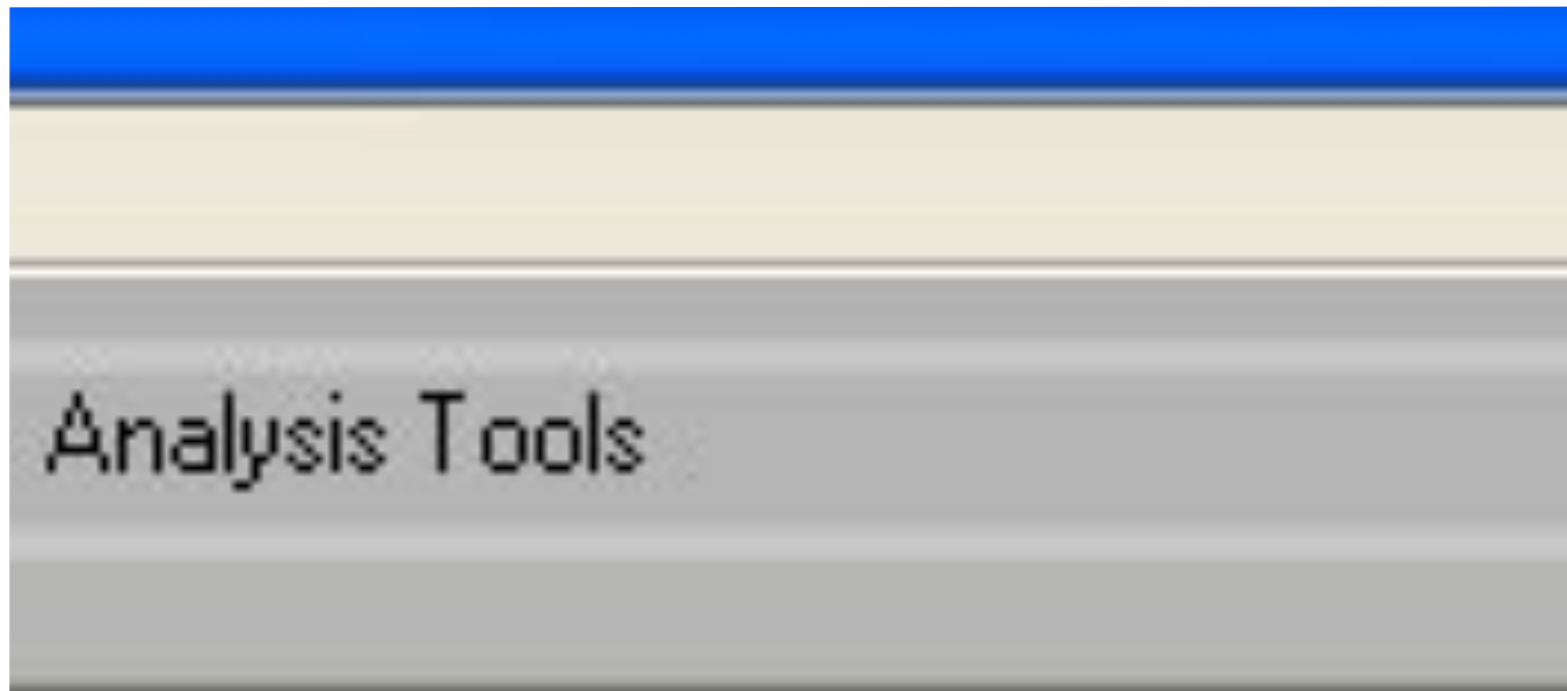
A screenshot of a video player interface. The background is dark blue. At the top, there is a light gray bar. Below it, the text "Play Marker" is displayed in a light green, monospace font. Below that, the time "00:01:47:375" is displayed in a larger, bold, light green monospace font. At the bottom, there is another light gray bar.

Play Marker
00:01:47:375

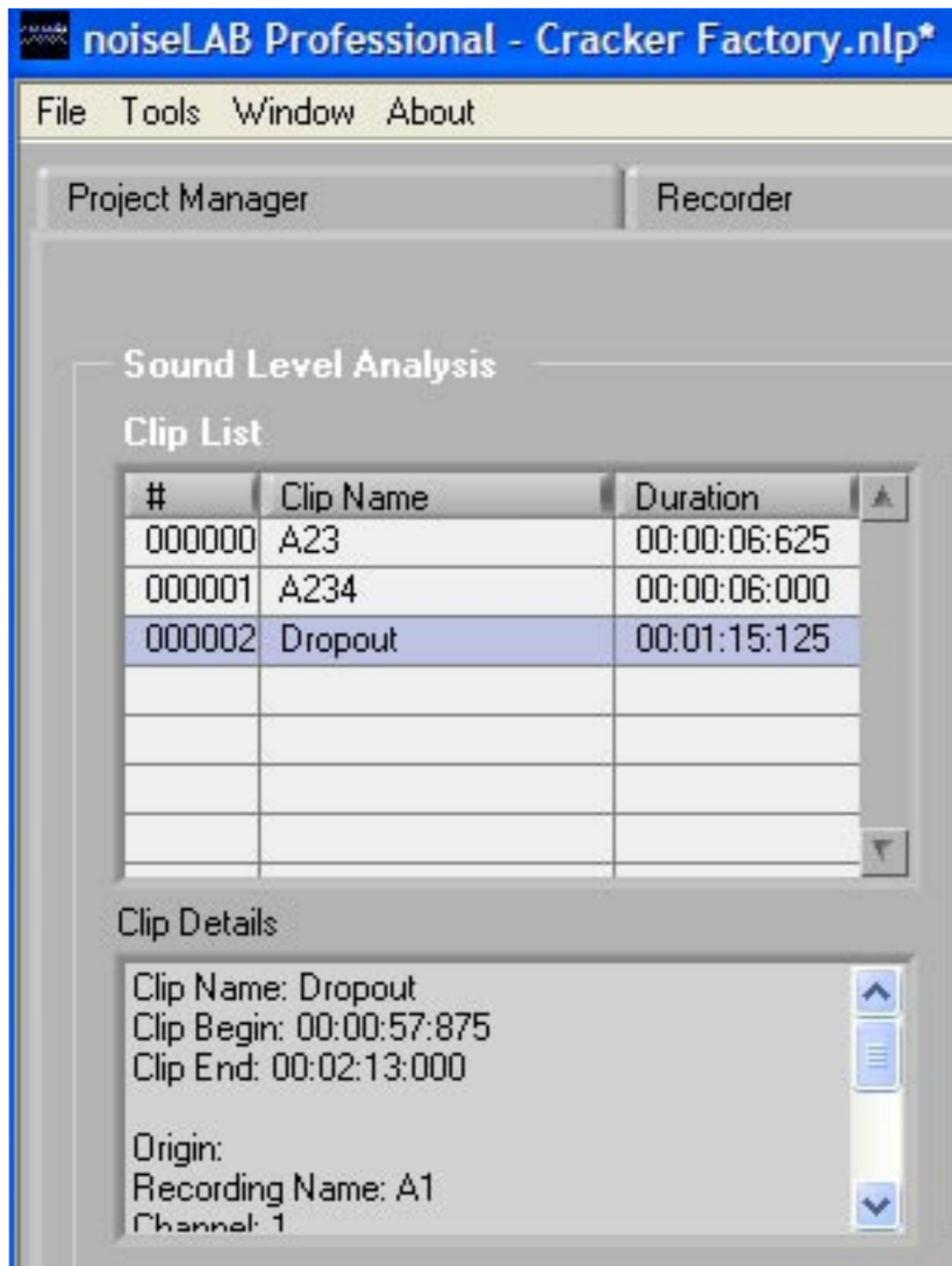
Clearly identified edit positions

In: 70.4 dBA
Play: 83.6 dBA
Out: 83.4 dBA

and levels of your edit points



Now the 4th Phase: Analysis



First Select your Clip(s)

General Settings

Weighting
Linear

High Pass Filter

None
 0.7 Hz
 20 Hz

Needed Results

Leq
 Subtract Background Noise
L dB

LE

Statistics

LPeak

Run Analysis

and what you want to measure, and press Run

Needed Results

1/1 Octave Include Pass By

Time Weighting

Linear

Max

Slow

Fast

Impulse

Custom Time [ms]

L

Correction

Subtract Background Noise

Clip Name
A234
Dropout

Note the few settings for Octave analysis

Octave Analysis

Clip List

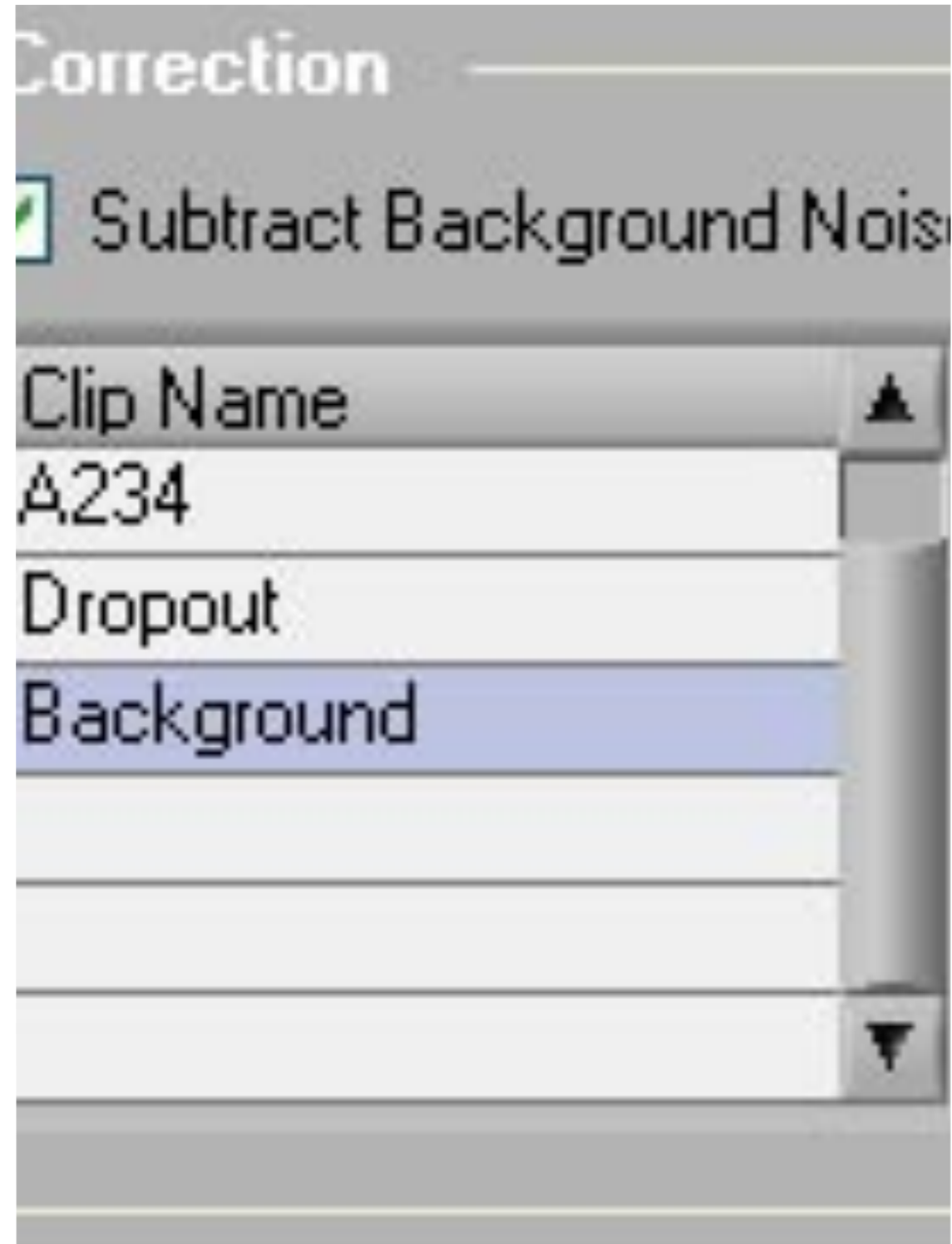
#	Clip Name
000000	A23
000001	A234
000002	Dropout

Clip Details

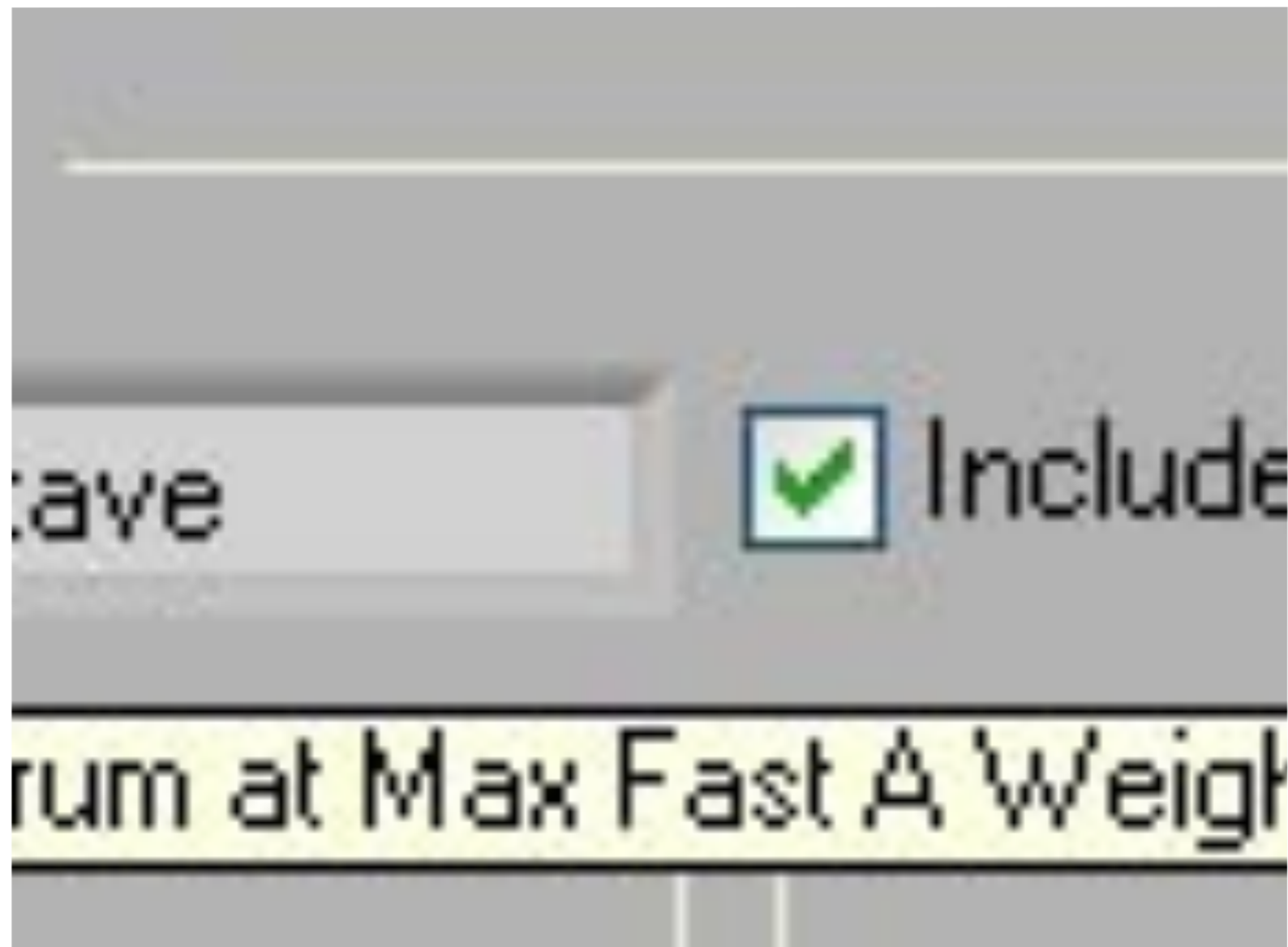
Clip Name: A23
Clip Begin: 00:03:05:750
Clip End: 00:03:12:375

Origin:

Select up to two clips



*Use a pre-recorded Clip as
Background noise
correction*



Find the spectrum at Maximum Sound Level

Needed Results



1/1 Octave



Include Pass By

Time Weighting



Linear



Max



Slow



Fast



Impulse



Custom Time [ms]

L



0

Correction



Subtract Background Noise

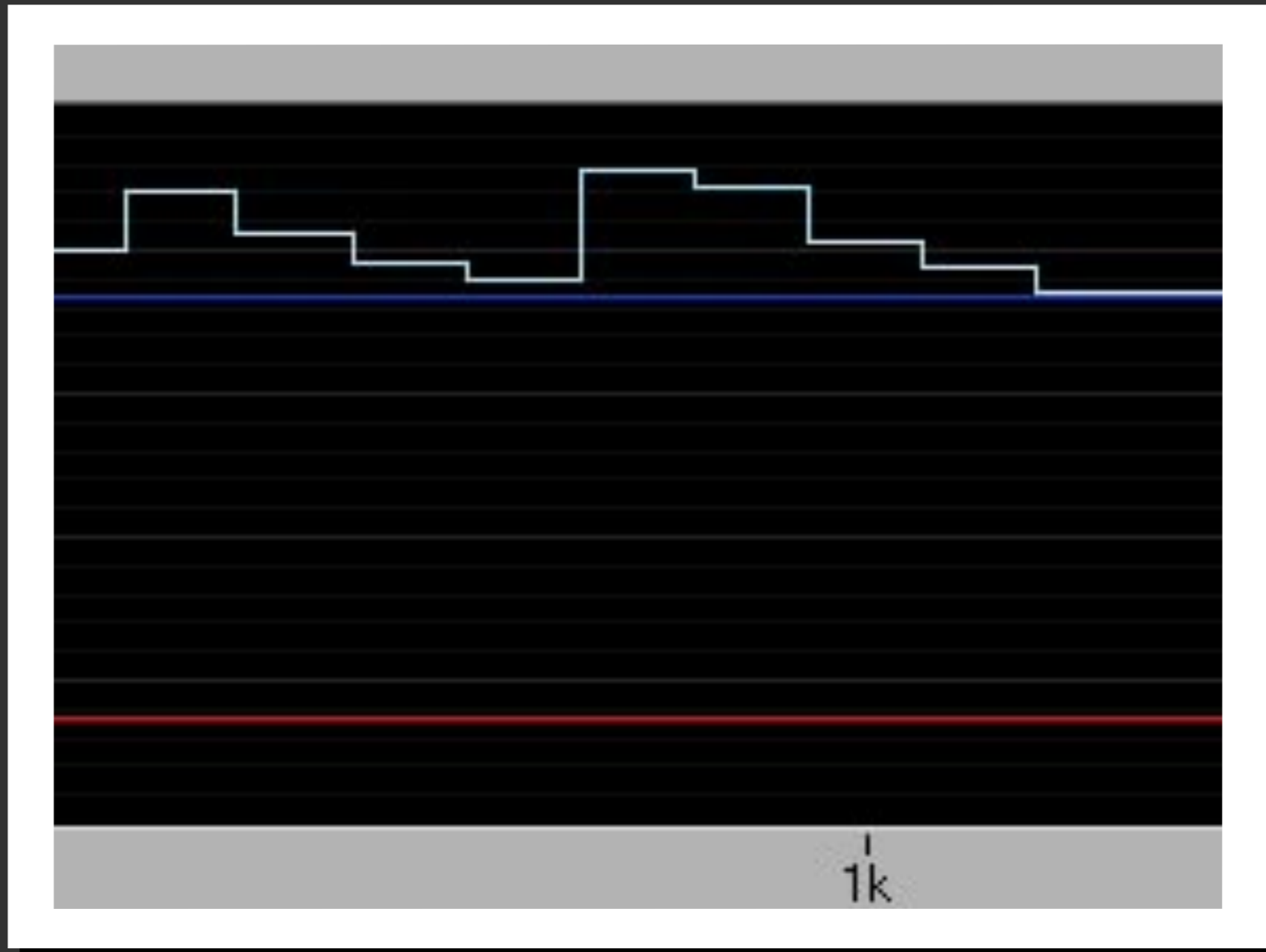
Clip Name

A.234

Dropout

Background

Complex measurements, few clicks



and fully documented results: Yes all the Meta data tags along

Needed Results

Frequency Resolution [Hz]

Window Type

Time Weighting

Linear

Max

Averaging Time [s]

Note: The discrete values of the Averaging Time is derived from the Frequency Resolution.

Correction

Subtract Background Noise

Clip Name

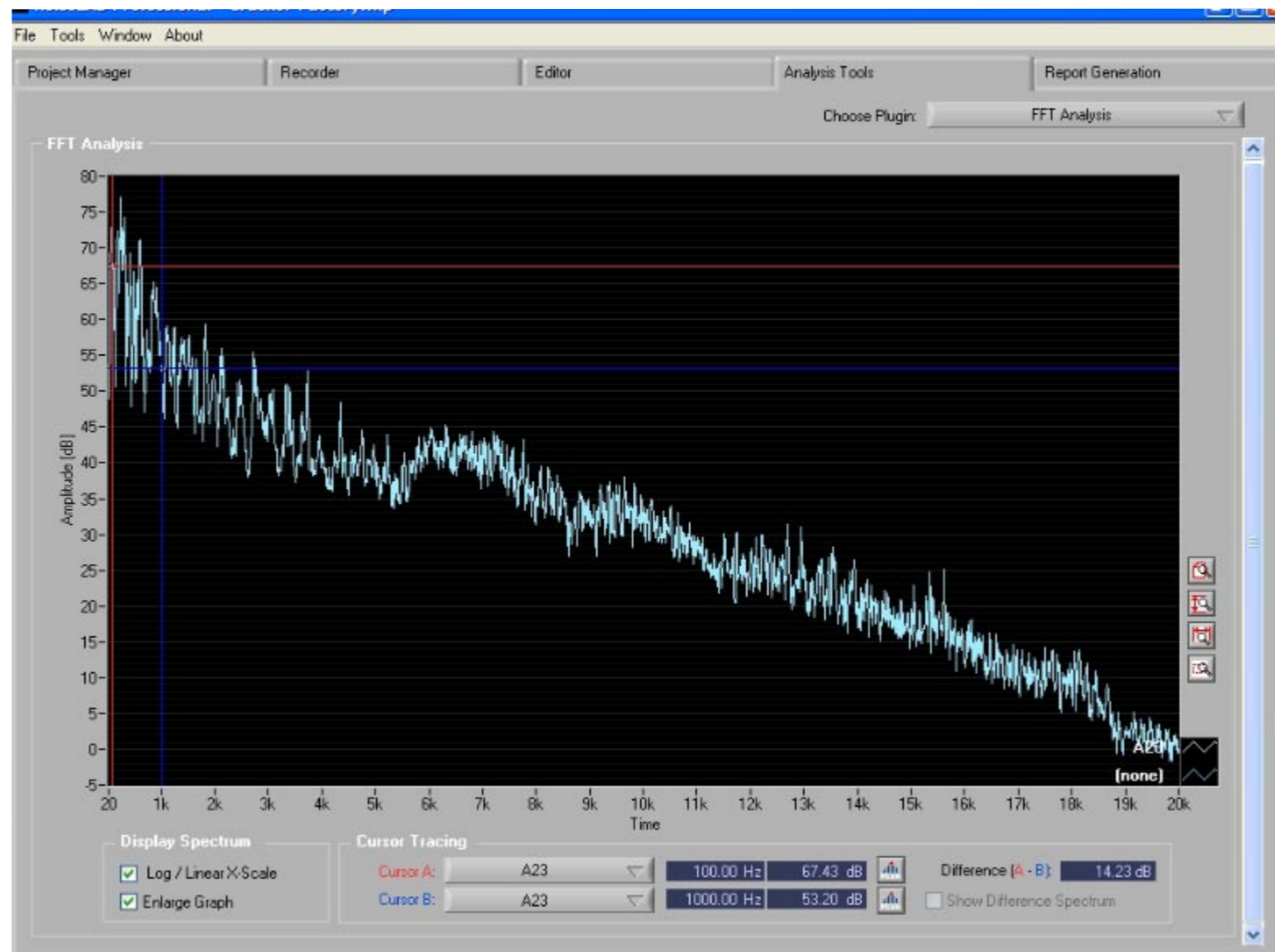
A23

A234

Dropout

Background

Simplicity for FFT Analysis



and quick results



Finally the 5th Phase: Report Generation

Clip Name	Soundcard	Input Units	Sample Rate	Bit Range	Available Channels
Dropout	SoundCard	Bit	44.1 kHz	16 bit	2

Table 4: Hardware information

Clip Name	Calibration Type	Calibration Time	Additional Information
Dropout	Post	14 September 2004 @ 14.30	If it is Pre, the clip name used for calib should be written here.

Table 5: General calibration information

Clip Name	Microphone Name	Microphone Type	Microphone S/N
Dropout	Mic Name	MicType	Mic S/N

Table 6: Calibration microphone information

Clip Name	Calibrator Name	Calibrator Type	Calibrator S/N	Calibrator Level [dB SPL]	Calibrator Frequency [Hz]
Dropout	Calibrator Name	Calibrator Type	Calibrator S/N	90.00	1000.00

Table 7: Calibration calibrator information

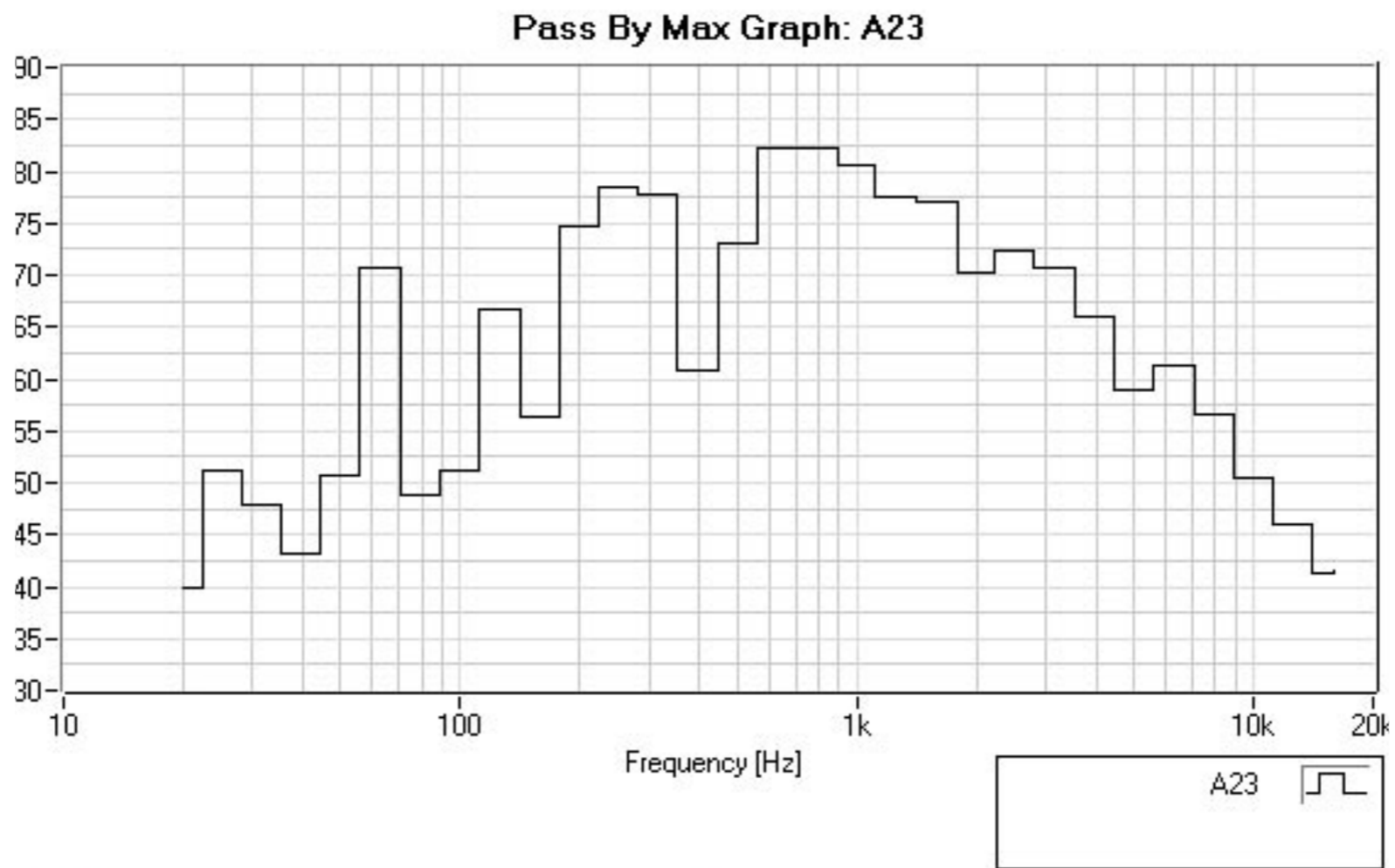
Clip Name	Sensitivity [Bit]	Frequency
Dropout	45.00	999.00

Table 8: Calibration results

Clip Name	Recording Name	Recording Comments	Recording Begun	Recording Length [s]
Dropout	A1	Trial Measurement to Verify set/up	23. dec 2004 @ 08:00:10	00:05:56:125

Table 9: Clip origin information

Click and and you have it!

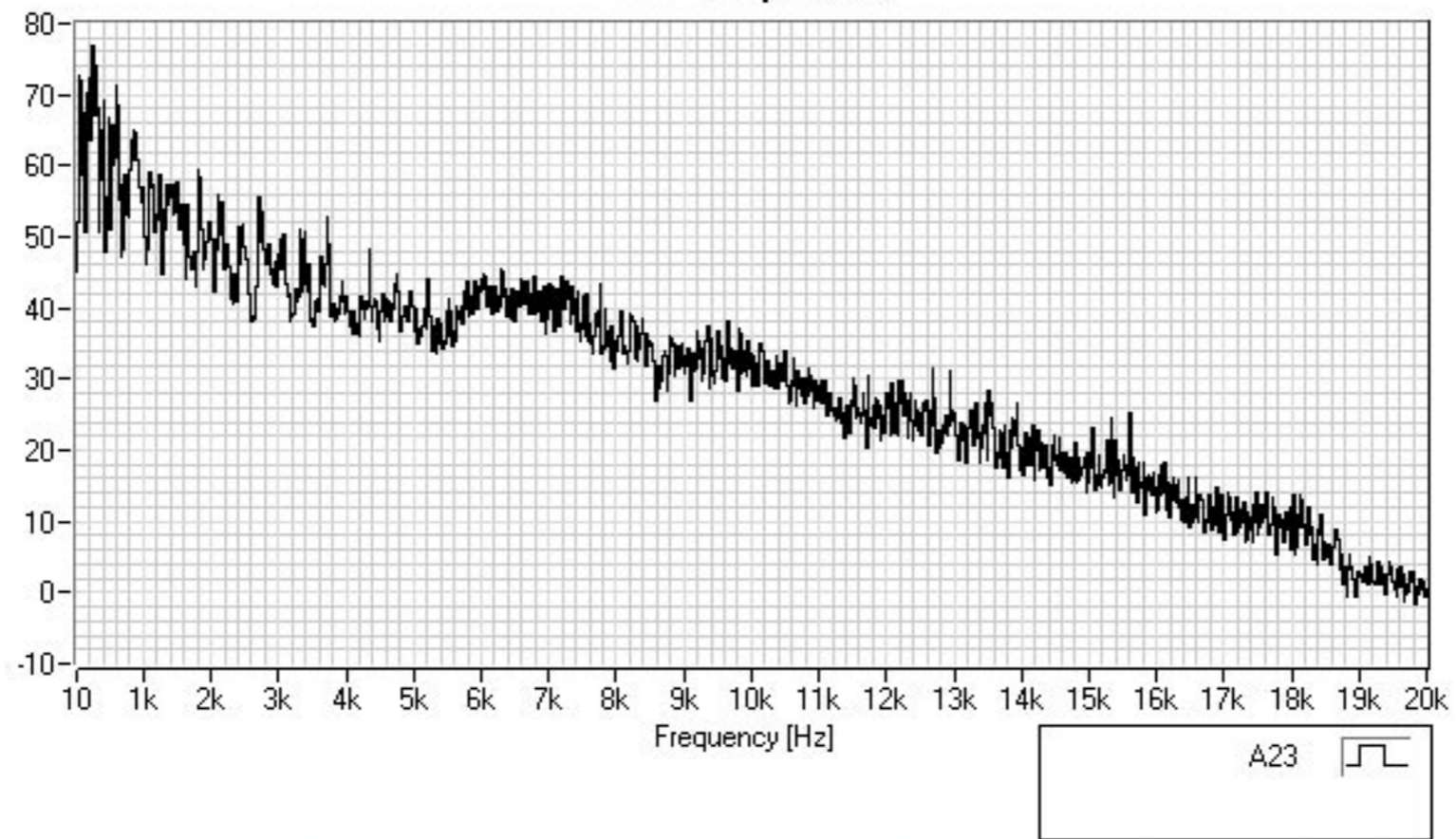


Graph Caption 2: 1/3 Octave, Linear. Spectrum is Background Noise Corrected. Detailed analysis information can be found in the 'Analysis Settings' chapter below.

Graphical too (Fully annotated thanks to the Meta Data)








raphs

FFT Graph: A23



Graph Caption 1: FFT Graph. Resolution 10 Hz, Window Type: Flat Top. Detailed analysis information can be found in the 'Analysis Settings' chapter below.

FFT Spectrum

 FFT1.html	10 KB	HTML Document	23-12-2004 08:43
 FFT1.txt	0 KB	Tekstdokument	23-12-2004 08:43
 FFT1.xml	4 KB	XML-dokument	23-12-2004 08:43
 FFT1.xsl	23 KB	XSL-typografiark	14-12-2004 14:48
 FFT1_FFTGraphA23.jpg	175 KB	JPEG-billede	23-12-2004 08:36
 footer_logo.jpg	3 KB	JPEG-billede	15-11-2004 16:32
 header_logo.jpg	4 KB	JPEG-billede	15-11-2004 16:11

JPEGs and text output to Excel, not to mention XML . . .

noiseLAB



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Developers: Allan G. Kristensen, Daniel Gjøde, Carsten Thomsen

Allan G. Kristensen

DELTA

D875E04FCA6BA0FAA8

Loading Plugin Core

noiseLAB: Simple Sophistication