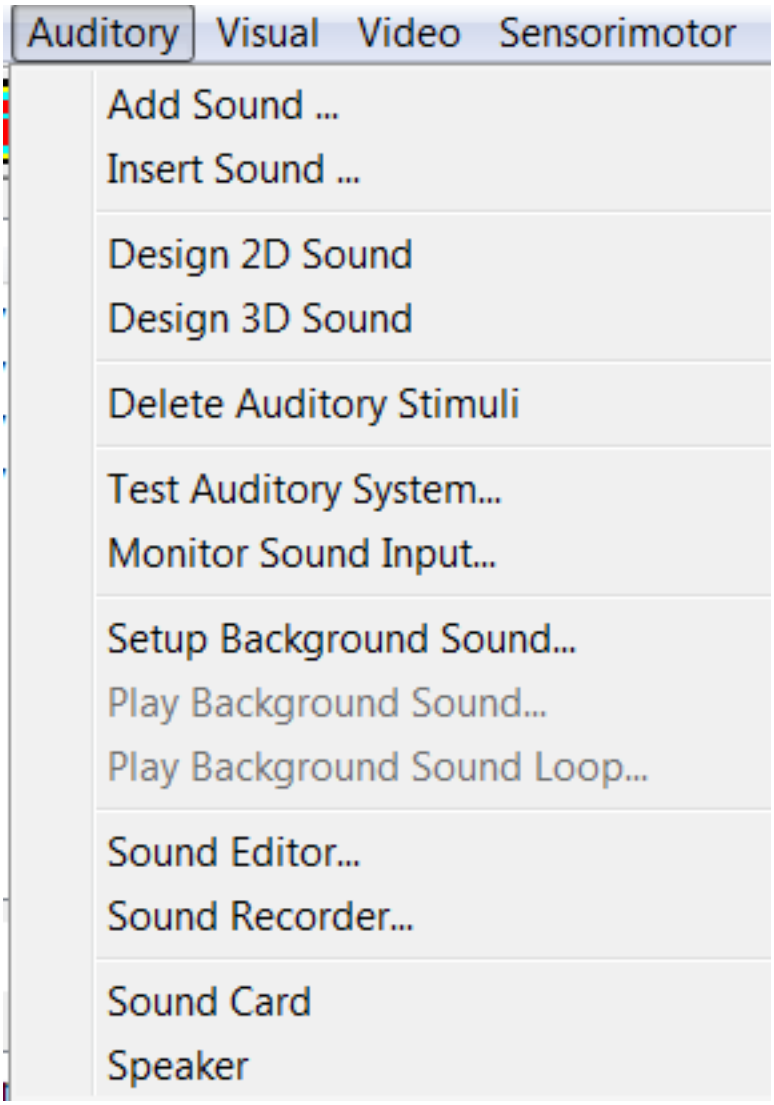
BrainX

Menu Auditory



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Sending Your Comments and Critiques: We'd like to hear from you. Your comments and suggestions for improving this document are welcome and appreciated. Please e-mail your feedback to: BrainX@live.com

Thank you.

Contents

Warnings and Cautions

This software can be used to design paradigms for magnetoencephalography (MEG), electroencephalography (EEG) and functional resonance imaging (fMRI).

The following warnings and cautions appear in this guide. Please ensure you are aware of all the operations and interpretations.

General Information

The Auditory menu includes all the functions for designing auditory stimulation, such as tone, white noise, spoken language and background sound or noise.

Add Sound

It adds an auditory file (sound) to the end of the stimulus list.

Insert Sound

It inserts an auditory file (sound) to the selected position of the stimulus list.

Design 2D Sound

It shows the dialog for designing 2D Sound and adds the designed stimulus into the stimulus list.

Design 3D Sound

It shows the dialog for designing 3D Sound and adds the designed stimulus into the stimulus list.

Test Auditory System

It shows the properties of the sound card in the computer and the delivery system in the MEG/EEG/fMRI suite.

Monitor Sound Input

It monitor the sound input (microphone is necessary to connect to the computer) during the stimulation/task. A threshold of sound level can be set to start or stop the paradigm. In addition, a threshold of sound level can be set or used to trigger the MEG/EEG/fMRI recordings.

Setup Background Sound

It enables users to setup background sound. This background sound can be played during the stimulation.

Play Background Sound

It enables the program to play background sound during the stimulation.

Play Background Sound Loop

It enables the program to play background sound repetitively during the stimulation.

Sound Editor

It records a sound and adds it to the Stimulus List.

Sound Recorder

It records a sound and adds it to the Stimulus List.

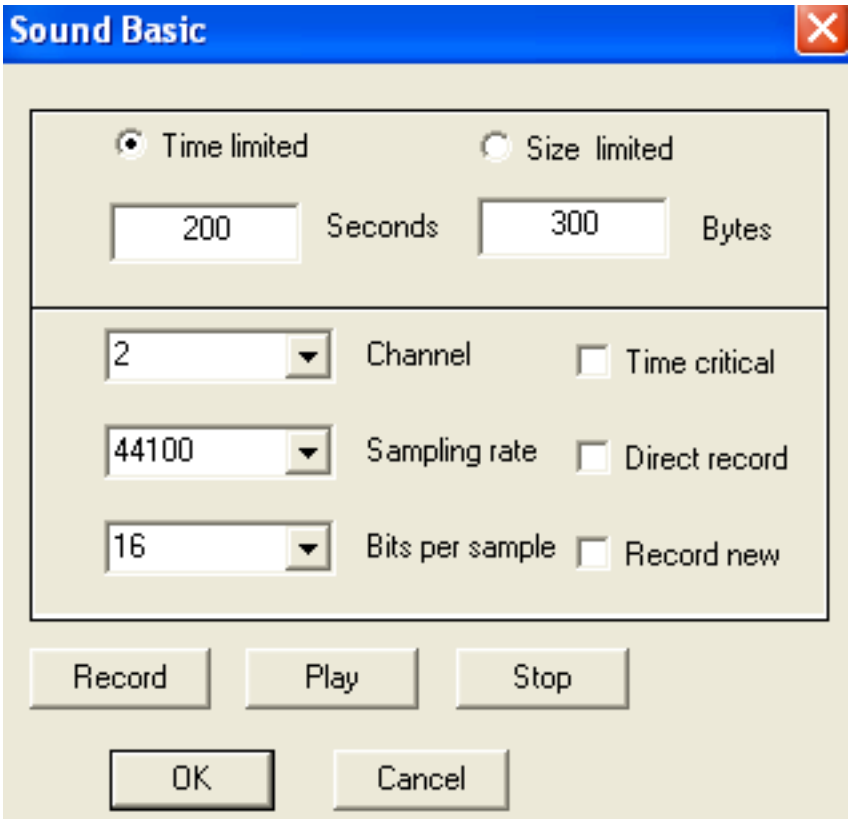
Sound Card

It checks the properties and feature of the sound card.

Speaker

It allows user to configure the speaker.

Recording Sound



This dialog is designed to record sound as an auditory stimulus. User can limit the record either as time limited (recommended as an auditory Stimulus) or size limited. In addition, user can change the data parameter in the recording.

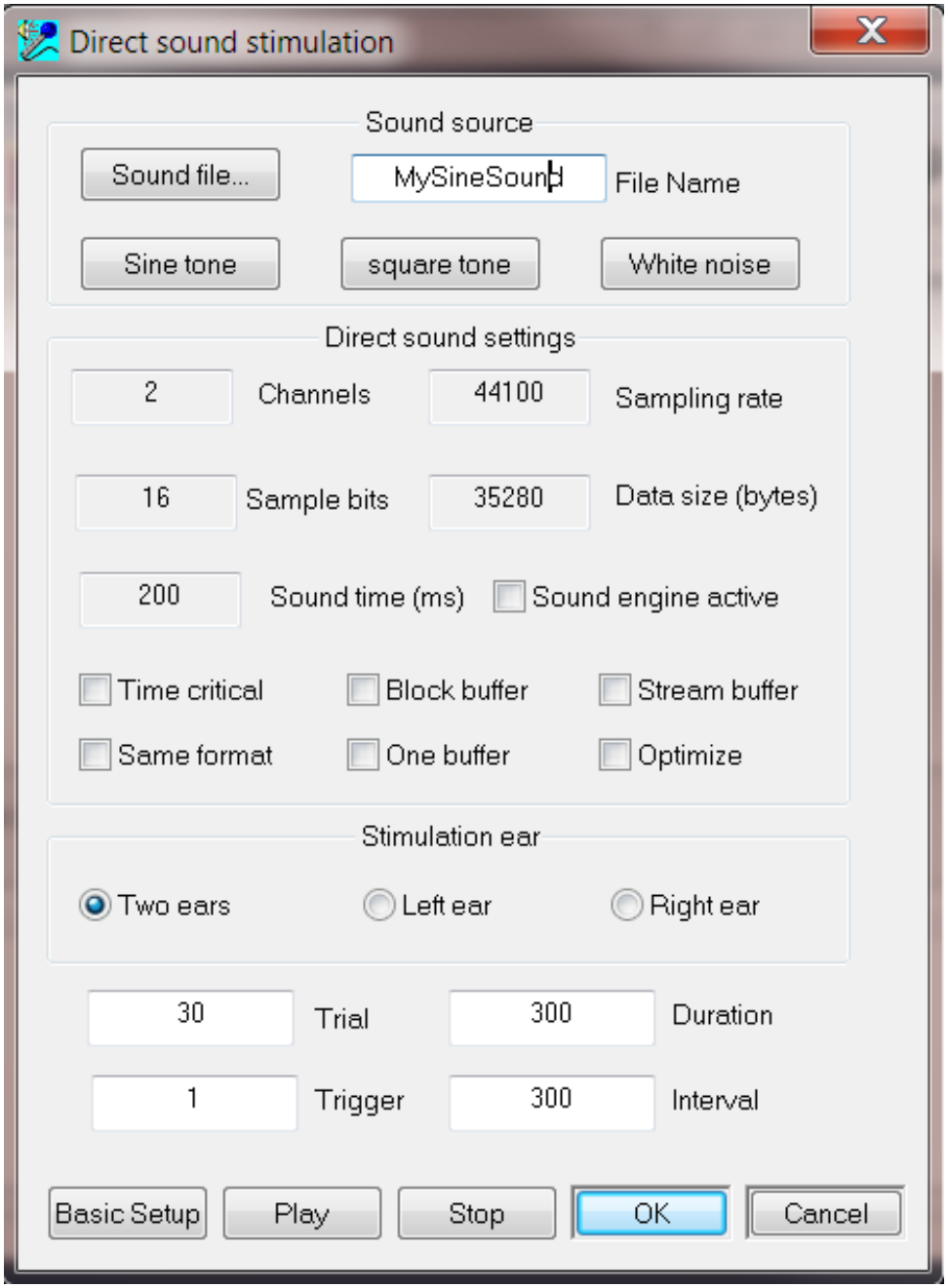
Record
It starts the recording.

Play
It plays the recorded sound.

Stop
It stops the playing or recording of the sound.

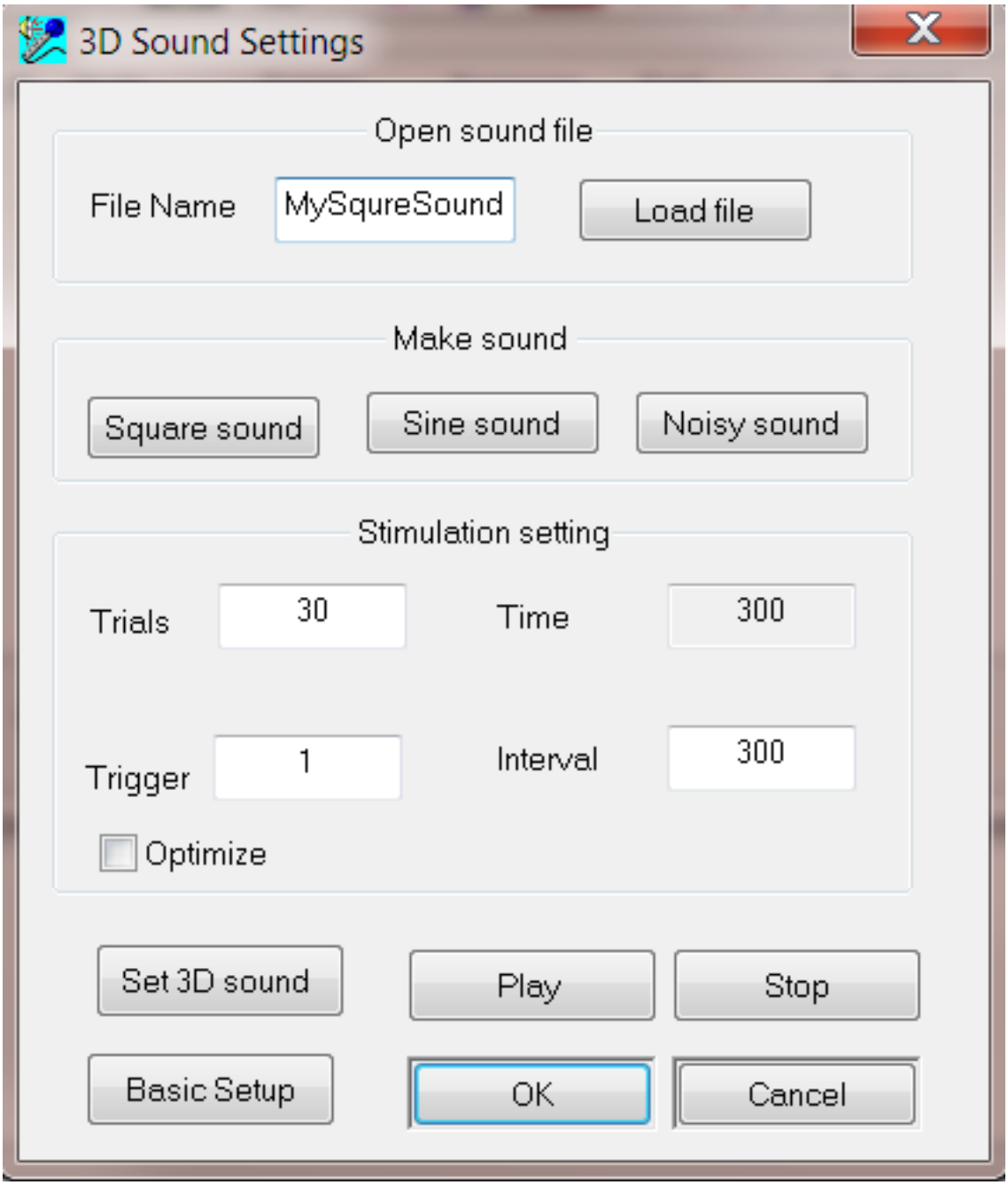
Design Sound (2D, stationary, mono or stereo)

It allows user to design a stimulation sound in 2D. User can load sound file or make a sound file. The disabled edit controls indicate that those parameters cannot be edited.



Design Sound (3D, motion, spatially positioned)

This dialog is designed for 3D sound. User can load sound file or make a sound file. To make a moving sound or specifically positioned sound (relative to the listener), click the Set 3D Sound Button.



3D Sound Parameters (motion parameters)

Clicking "set 3D sound" buttons in the 3D Sound dialog will evoke this window. The sound position and movement can be setup by use keyboard in this dialog. The sound position includes two parts: sound source and sound listener. You can change either part and the relative position will change accordingly. We recommend that you change the sound source position instead of changing the sound listener.