



## Articulograph AG500 Sound recording with a soundcard under Windows

### Installation of AG5SndRec

- Create a folder named "SndRec" and copy the file "Ag5SndRec.exe"
- extract the sound.zip file to it – this \*.wav files are for optional use
- Create a subfolder "SndTmp" in SndRec and share it with share name "SNDTMP" and all access rights for everyone.

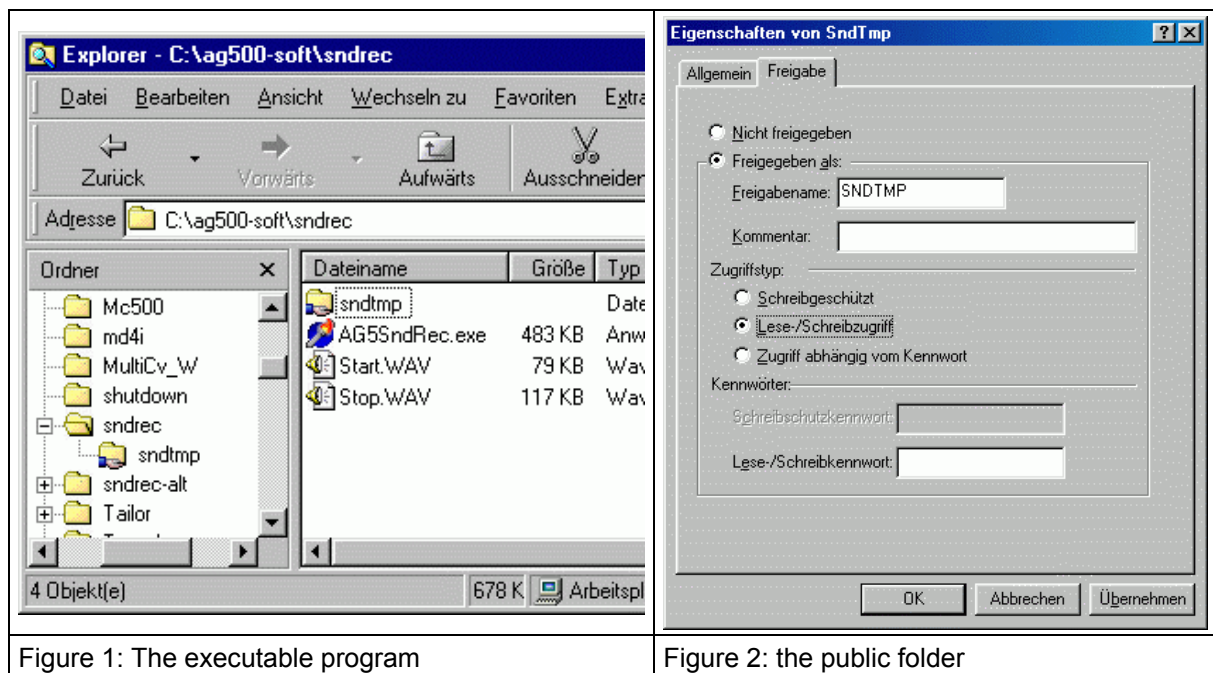


Figure 1: The executable program

Figure 2: the public folder

- example: c:\sndrec\sndtmp, see fig 1 and fig 2
- optionally create a link to Ag5SndRec.exe on your desktop and/or your start menu

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Q:\QMManuals\Ag5SndRec\Sound_rec2.doc	

## Check the sound recording

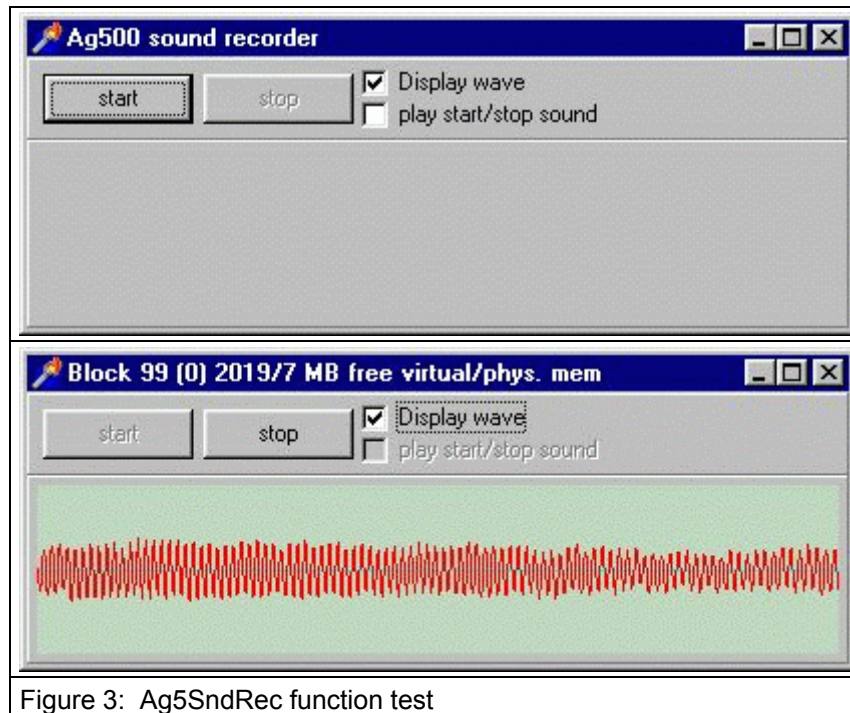


Figure 3: Ag5SndRec function test

The sweep signal on the left channel is used to find the exact time points and the right channel has the sound signal.

- on starting Ag5SndRec you'll see fig 3 (upper picture)
- make sure to select "line in" as source for recording (see soundcard manual and windows documentation)
- connect the "sweep" signal from your SyBox to the left channel of your line in port
- connect a microphone amplifier's output to the right channel of your line in port

### Function Test

- verify settings and connections by pressing the "start" button in AG5SndRec:
- the red line should show the microphone signal
- click the "record sweep" button in AGMaster (not MC500)
- the green line should show a short peak when sweep recording starts and another peak when it stops.
- press "stop" button in Ag5SndRec to stop sound recording

### Make sure the sound sample clock is 16kHz

Some sound cards run with different sample clock frequency even they say it is 16kHz.

To check the frequency, please record a long sweep. Bounce with the magazine against the bottom of the helmet holder and record this sound. Verify that the sensor movement stops at the same point as the sound starts.

### Options

The Ag5SndRec program uses the sound card in your computer. Because the program does not know all functionally parameter of your individual sound card, it is not guaranteed that the options will run correctly.

### Display wave

Set this option to check and adjust the sound signal and to make the start- and stop-synchronisation pulses visible. The MC500 program will automatically uncheck this option on start sweep recording. It is possible (but not recommended) to check this box when sweep recording is running.

### play start/stop sound

This option plays the “start.wav” sound on start sweep recording and “stop.wav” when sweep recording stops.

This Option may cause problems with some sound cards. This is dangerous because problems may occur not at once but after a number of sweeps is recorded.

So if you want to use this option, make sure that your computer will not run into problem after a large number of sweeps.

## How to use the sound recording in an AG200 session

- start the Ag5SndRec.exe
- the program comes up with a window shown in fig.3 (upper picture)
- please do nothing else with this program



Figure 4: Ag5SndRec.exe

The program is controlled by the MC500 program via TCP/IP. Start- and stop recording is synchronous to the sweep recording.

- select AG200 session in the MC500
- select the computer where the Ag5SndRec program is running
- start sweep recording

The MC500 program deselects the “Display wave” check box on sweep start. This is to prevent timing problems during sound recording.

When the Ag5SndRec program recognises the start-synchronisation pulse (peak), the windows background becomes dark red and stays in this colour until the stop-synchronisation pulse appears.

After sweep recording the title bar shows the number (2 peaks) of recognised peaks.

## Ref:

[AG200 Instruction](#)

[MC500 manual](#)