

**Purpose:**

This note explains the options available for recording and playback of .wav files in ScadaPhone version 4.2.1.10 and higher. It also provides some suggestions for getting the best sound quality.

**Note:**

We will discuss two methods for recording and playback of .wav files. If other methods of creating the wav files are used, keep in mind that the resulting wav files must be 16 bit monaural and recorded at 8K samples/sec.

**Recording & Playback Methods:**

1. Through the ScadaPhone supplied voice modem.
2. Through a PC sound card.

Because telephone lines have a limited frequency bandpass, typically 3KHz to 5KHz, there is not much practical difference in recorded voice wav files generated using our supplied modem and microphone vs a high quality PC based sound card and microphone.

**Controls and Options available within ScadaPhone:**

The following controls and options are available from our menus:

1. Automatically adjust the recording volume  
Select 'Options | Auto adjust Amplitude When Recording' from the main menu.
2. Option to use the PC sound card.  
Select 'Options | Audio Devices' from the main menu and check the Checkbox.
3. Adjust the modem playback volume level  
Select 'Modem | Volume' from the main menu and adjust the Slider Control.
4. Adjust sound card record and playback volume.  
Use the volume control applet. – 'Start | Programs | Accessories | Entertainment | Volume Control'

**Recording Tips:**

Select a quiet area. Noise from the PC fan, hard disk, etc. as well as other ambient room noise will be detrimental to recording quality.

Use a foam cover on the microphone to minimize the hisses and pops that are common during speech.

Speak at a 90 degree angle to the microphone instead of directly into it.

Speak clearly and distinctly with adequate volume.

If using the modem for output, start by adjusting the modem volume to ¼ full volume.  
(‘Modem/Volume’)

If recording via the modem, uncheck the box titled ‘Options/Auto adjust Amplitude When Recording’.

If using the ‘system’ wav files provided, try to match the recording level of the ‘system’ wav files as closely as possible. This will give you sound volume consistency between words and phrases.

The amplitude of one or more files may be adjusted after they are recorded in the ‘Edit Wav File’ form. However, boosting the level of a low volume wav file will also boost any ambient background noise. It is better to record the wav files with sufficient volume to begin with.