TO MAKE A RECORDING USING WAVESURFER:

1. Turn on the recording equipment rack using the white rocker switch on the top left.

2. On the same equipment rack, make sure that the switch is set to RECORD on the patch panel. On the same patch panel, select the cutoff for the anti-aliasing filter as either 4800 Hz or 7500 Hz.

3. Login. (These instructions assume that the computer is running Windows.)

4. Start wavesurfer by double-clicking on the Wavesurfer icon.

5. Select File→New, and then click Waveform from the Choose Configuration pop-up. This will bring up a waveform window for your recording. Or, you can enable various real-time displays that will be active during recording. Right click the mouse in the lower half of the wavesurfer window and select Create Pane. For example, create a Waveform display and a Spectrogram display.

6. Select your sampling rate using File→Preferences. Near the bottom of the panel, there is an option called New Sound Rate. Select your sampling rate. A rate of 16000 is appropriate for an LPF cutoff of 7500 Hz (on the patch panel), and a rate of 10000 is appropriate for an LPF cutoff of 4800 Hz (on the patch panel).

7. To record, click the red circle.

8. To stop recording, click the black square.

9. Adjust the gain to make use of the range of the system. The limits on the waveform amplitude are +/- 32767 for a 16-bit recording. Check for clipping and adjust the gain on the pre-amp if necessary. The microphone is on channel 4 (Mic. 4/Line).

10. To save all of your recording to a disk, use File→Save.

11. To save a portion of your recording to a file, position the mouse at the starting point in the waveform. Hold down the left mouse button and drag to the right to highlight your selection. Use File→Save Selection to save the highlighted region to disk. You can use the slider on the bottom of the display to navigate through the recording. Left click the mouse and drag the highlight bar to the move within the recording.

12. Save your files in MS wave format. Under your Linux account, you can use ms2kl to convert to Klatt wave format. You can transfer a file to your Linux account using SSH. (See attached documentation for these tools.)

13. Logoff and turn off the equipment rack using the white rocker switch.
Trouble-Shooting

1. Make sure that the equipment rack has power. White rocker switch on the upper left should be lit or at least flickering.

2. Right click on the speaker icon in the icon tray (lower right) and select ‘Open Volume Controls’. Make sure that Line In has the volume turned up.

2. Check which audio devices are being used by wavesurfer. Select File→Preferences. The Input and Output devices should both be ‘Creative Sound Blaster PCI (Win multimedia)’.

3. Confirm the cabling. The output on the rear of the pre-amp (Line Out) goes to ‘Mixer Out’ on the back of the patch panel. There should be a jumper between ‘LPF Out’ and ‘LR Outputs’ on the rear of the patch panel. ‘Line out’ on the front of the patch panel goes through the port in the wall and into the blue input jack on the back of the computer. (line in).
FILE TRANSFER – WINDOWS TO LINUX

1. Double-click the icon for SSH Secure File Transfer.
2. Hit <RETURN> to initiate a transfer session. The following window should pop-up. Enter speech.mit.edu for the hostname and your username for User Name. Enter your password at the prompt and drag-n-drop your files.

3. If the above window does not appear, and instead you are just prompted for a password. Exit the password prompt (click the X in the upper right corner.) Then choose Edit→Settings to enter the appropriate Host Name and User Name in the following window:

FILE CONVERSION ON LINUX

At the prompt, use ms2kl to convert from a MS .wav file to a Klatt .wav file. Entering ms2kl at the prompt without any arguments will return a help file.