

**6.542J, 24.966J, HST.712J LABORATORY ON THE PHYSIOLOGY,
ACOUSTICS, AND PERCEPTION OF SPEECH
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Lab 1 Handout

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Using Klatttools on UNIX system

1. **To log in**
Type *labc*
Type *password*
Type *startx*
Click on *xterm*
Cd *group1, group2, group3, ...* (depending on your group)
2. **To make a spectrogram of a file xxx.wav**
Type *lspecto xxx*
This creates a ps file *xxx.ps*
To print the spectrogram type *lpr xxx.ps*
3. **To examine waveforms and spectra**
Type *xkl xxx*
This will display a waveform (at top), an expanded waveform (bottom left), and a spectrum at the location of the cursor (middle left).
Parameters of spectrum can be changed by clicking on *spectrum*.

To make a spectrogram

Type *i*

To save a spectrum or waveform

Click on file and follow instructions.

(a) *open a ps file yyy.ps* (b) *save to ps file* (c) *close ps file*

To print, type *lpr yyy.ps*

4. **To make a recording on VAX workstation**

Log in on VAX:

Type *labcourse*

Type *password*

Type *record* (or *record - s13000* if sampling rate is to be 13 kHz)

set gain to 1

When recording into a/d converter, try to adjust gain so that the maximum level (as displayed) is in the range -1 to about -8 dB.

Edit displayed waveform by typing *s* for start and *e* for end of utterance to be saved.

Save by typing *W* and giving a name (.wav not needed).

5. **To convert waveform files from VAX to UNIX workstation**

Log in to the UNIX workstation.

Type *ftp spoken*; you will be asked for the username (*labcourse*) and password.

Now use *cd* to get to the directory you want; for example, if your waveform is [.group5]shutter.wav, type *cd group5*.

Enter the command *binary* to put ftp into binary mode, and then type *get xxx.wav*, if *xxx.wav* is the waveform to be converted.

Finally quit.