Electronic Media I
Assignment 7, due Oct. 7

Goal: To learn how to record from a microphone to the Macintosh.

Personal Materials: Found objects such as pots and pans, paper, cardboard, rubber goods, jars of noisy things, etc.

Studio Materials: Electro-voice dynamic cardioid microphone, XLR microphone cable, microphone stand.

1) Patch Studio One as follows:

   a) Mackie Sub Out 1 -> AM III In 1
   b) AM III Out 1 -> Mackie In 1
   c) AM III Out 2 -> Mackie In 2
   d) Mackie Main Out 1 -> Alesis In 1
   e) Mackie Main Out 2 -> Alesis In 2

2) Set up the microphone as follows:

   a) Place the microphone into the mic holder on the stand
   b) Attach the XLR cable to the microphone
   c) Plug the other end of the mic cable into XLR input 16 of the Mackie mixer (see diagram on back page)
   d) Adjust the mic stand so that your objects will be 6-12" away from the mic

3) Set up the Mackie mixer as follows (see diagram):

   a) **Ch. 1-2**:   **Trim** knob should be 10 db (all the way to the left)
                  Aux controls are non-functional
                  EQ controls should be flat (knobs in center position)
                  Pan knob should be centered
                  L-R button should be **in**
                  All other buttons should be **out** for each channel
                  Faders should be set to normal level

   b) **Ch. 16 Trim** knob should be set by user (center position is a good place to start)
                  Aux controls are non-functional
                  EQ controls should be flat (knobs in center position)
                  Pan knob should be centered
                  1-2 button should be **in**
                  All other channel buttons should be **out** (especially make sure that **1-2** button is **out**)
                  Fader level should be determined by user

   c) **Assign to Main Mix** buttons should be **out**.

    d) **Sub Out 1 Fader** (fader 1 under **Assign to Main Mix** buttons) level should be determined by user

    e) **Main L-R Mix** fader should be **down** (until you turn this up, there will be no sound in the room)

4) Launch **Sound Designer** and set up for recording as follows:

    a) Create a new mono file named "YI.Whatever.1" where "whatever" is the name of the object being recorded.

    b) Click on the tape recorder icon shown below:

Tape recorder icon

    c) A window like the one below will appear:
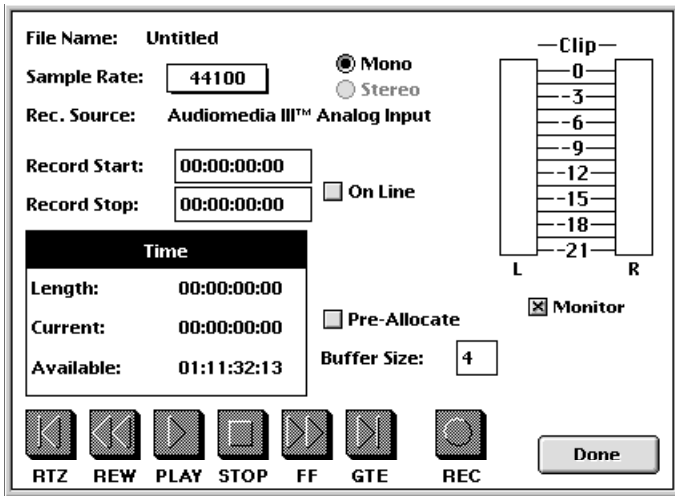
    d) Confirm that the sample rate is 44100 and that the Monitor box is checked.

5) Set up the recording gain structure as follows:

    a) **Ch. 16** trim set to @ -10 db
    b) **Ch. 16** fader set to unity gain
    c) **Sub Out 1** fader set to unity gain

c) Speak into the mic
d) The record level meters in the upper right corner of the window should show activity
e) If the level is too soft, increase the Ch. 16 trim
g) If the level is too loud, decrease **Sub Out 1** fader
h) <u>Do not</u> turn up the Mackie **Main L-R Mix** fader until you are finished recording, otherwise feedback will occur.

6) Prepare to record your first object as follows:

a) Strike or blow or whatever on the object and see of the level if too high or too low
b) Adjust level as in Step 5

7) When the level is set for your first object, record it as follows:

a) Press the **REC** button at the bottom of the window
b) Notice that the time indicators are now moving
c) Make your object sound
d) When object is finished sounding, wait @ 2-3" for the sound to completely fade away
e) Press the **STOP** button
f) Press **Done**.
g) The recorded sound should appear on your screen.

8) To hear what you have recorded, do the following:

a) Turn up the **Main L-R Mix** fader
b) Play your file as you normally do
c) If the sound is too soft, normalize it.
d) Edit out silence at the beginning and end of the sound.

9) To record another object, turn down the **Main L-R Mix** fader and repeat steps 6-8.

10) You should record 15-20 objects representing the following catagories:

a) metal objects struck once (pots, metal sheets, bars, pipes, etc)
b) metal objects stroked or scraped
c) rubber bands plucked ONCE
d) stiff cardboard shaken ONCE
e) paper crumpled ONCE very quickly
f) a jar of coins, beans, etc. shaken ONCE
g) balloon popped (ONCE?)
h) wet balloon stroked ONCE
i) air let out of balloon to produce pitch
j) your own vocalizations (brief and distinctive)

11) Keep your sounds short (.05 to 3"). It is important that you let each sound die away so that you can capture all of the timbral nuances that occur. DO NOT create any compositional or rhythmic patterns, since you will be doing this later with the soundfile that you have created. Don't get ahead of yourself.

12) When you are finished, make sure your sounds are clean (no noise or excessive silence before and after) and organized into a folder on your disk.

13) Optional: begin to transform these sounds in Sound Designer, SoundHack, and Lemur. You may also begin combining them in Session.

14) Non-optional: Clean up any mess you make during the recording process. All objects must be removed from the studio by Oct. 7.