

Electronic Media I
Assignment 9
Due Thursday, Nov. 10

Assignment 9 consists of creating and/or modifying 24 Casio patches in Galaxy..

Beginning Assignment 9

- 1) Turn on the audio system, Macintosh, and Casio CZ-1 front.
- 2) Set up the Casio for MIDI receive.
- 3) Insert a blank floppy disk into the Macintosh, format it, and title it "Your Name.4".
- 4) In the Electronic Media Class Folder, open the file "Assignment 9 Bank" and save it as "YI.Editing" onto your floppy disk.
- 5) After the file "YI.Editing" opens on the screen, enter the librarian by double-clicking on the icon **patches**.
- 6) Using the **load/send** menu, send the bank of sounds to the Casio (confirm that the voice lights flash on the Casio during this).
- 7) Choose a patch you wish to edit and double click on its alphanumeric symbol to enter the editor.
- 8) Do not make changes to the key follow and key velocity values shown in the top areas of the module windows (I have already set these for you).
- 9) Edit the patch so that it meets the specifications detailed below.
- 10) Pull down the **edit** window at the top of the screen and select **edit patch name**.
- 11) After the **name** window pops up, re-name the patch appropriately (see below).
- 12) Pull down the **patch** window at the top of the screen and select **store current edit**.
- 13) Close the **edit** window by clicking on the box in the upper left hand corner.
- 14) Confirm that your edited patch is stored in the bank.
- 15) Repeat steps 7-14 for each patch you wish to edit.

Editing procedures

Unless contradicted by the general patch specifications given below, your patches may use:

- a) any **DCO** wave type
- b) moderate and subtle **DCO** pitch envelopes
- c) any **DCW** envelope
- d) any **Line** output
- e) any **vibrato** characteristics

General Patch Specifications

Your patches should be either **harmonic** or **inharmonic**. They should have envelopes whose attacks are either **fast**, **medium**, or **slow**. These are discussed below.

Harmonic and Inharmonic Patches

- 1) **Harmonic patches** are those whose overtones are harmonics. These sounds will have a definite pitch. Any patch which does not use **modulation** will be **harmonic**.
- 2) **Inharmonic patches** are those whose overtones are inharmonics. These sound will not have a definite pitch and will sound metallic. To create **inharmonic** patches:
 - a) Click on the **Line Sel** window and select **Line 1 + 2'**, as shown below.
 - b) Pull down the **modulation** box and select **ring**, as shown below.

LineSel
1+2' ▶
Octave
1 ▶
Mod
Ring ▶

c) In the **detune** window:

- 1) select + for upward detune or - for downward detune.
- 2) choose any combination of values for **octave**, **note**, **fine** to set the modulation frequency, as shown below.

Detune			
+/-	Oct	Note	Fine
+	2	10	27

d) In order to control the modulation index independently of velocity:

- 1) Choose any value for the amplitude of **DCA2**, and
- 2) Set the **velocity** value of **DCA2** to 0, as shown below.

		amplitude			velocity
DCA2	15	▶	0	▶	0

e) Create a modulation index envelope by giving **DCA2** a slower attack than **DCA1**.

f) Create a modulation brightness envelope by giving **DCW2** a different attack than **DCW1**.

Fast, medium, and slow attacks of carrier envelopes.

1) The speed of an envelope's attack is determined by its **rate 1** value. This is a number which may range from 0-99 and is found in the upper lefthand corner of the window shown below (clicking on the envelope graphic will highlight these values).

DCA1	15	▶	0	▶	15			
rate 1	95	50	-	-	-	-	-	-
	99	0	-	-	-	-	-	-

2) We will define attack speeds as follows:

- a) **fast** has a **rate 1** value of 80-99
- b) **medium** has a **rate 1** value of 60-79
- c) **slow** has a **rate 1** value of 40-59.

Organization and naming of harmonic and inharmonic patches and their attack speeds.

Your 24 patches should be organized and named as follows:

4 harmonic sounds with fast attacks, named:	YI.h.f.1	YI.h.f.2	YI.h.f.3	YI.h.f.4
4 harmonic sounds with medium attacks, named:	YI.h.m.1	YI.h.m.2	YI.h.m.3	YI.h.m.4
4 harmonic sounds with slow attacks, named:	YI.h.s.1	YI.h.s.2	YI.h.s.3	YI.h.s.4
4 inharmonic sounds with fast attacks, named:	YI.i.f.1	YI.i.f.2	YI.i.f.3	YI.i.f.4
4 inharmonic sounds with medium attacks, named:	YI.i.m.1	YI.i.m.2	YI.i.m.3	YI.i.m.4
4 inharmonic sounds with slow attacks, named:	YI.i.s.1	YI.i.s.2	YI.i.s.3	YI.i.s.4

Completing Assignment 9

- 1) Save your file and quit **Galaxy**.
- 2) Go into the Electronic Media Class Folder, open the file "Empty Bank" and save it as "YI.Front" onto your floppy disk.
- 3) After the file "YI.Front" opens on the screen, pull down the **file** window at the top of the screen and select **open**.
- 4) When the **open** window pops up, select "YI.Editing".
- 5) Confirm that you have two banks open on the screen and notice that you can activate either window by clicking on it.
- 6) Activate "YI.Editing" and highlight the file "YI.h.f.1" and copy it (using the "Apple C" command).
- 7) Activate "YI.Front" and highlight the alphanumeric symbol "A1".
- 8) Paste "YI.h.f.1" into the A1 slot (using the "Apple V" command).
- 9) Repeat steps 6-8 to paste "YI.h.f.2" into slot A2, "YI.h.f.3" into slot A3, and so on.
- 10) Save file "YI.Front" and drag it into your personal folder on the hard disk.
- 11) Drag the file "YI.Editing" and place it into the trash can on the desktop.
- 12) Label your floppy disk and give it to Larry on November 10.
- 13) Grading criteria: musicality and variety of sounds.