



Korg GEC3 and Casio CTK-6000 Keyboard  
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# Digital Music at Haverford High School Havertown, PA

- Doubled the size of the music program - 384 students elect to take a music tech elective each year at Haverford High. (Total 1200 students in the school)
- No prerequisite; no music experience required; open to all students, all levels, all grades.



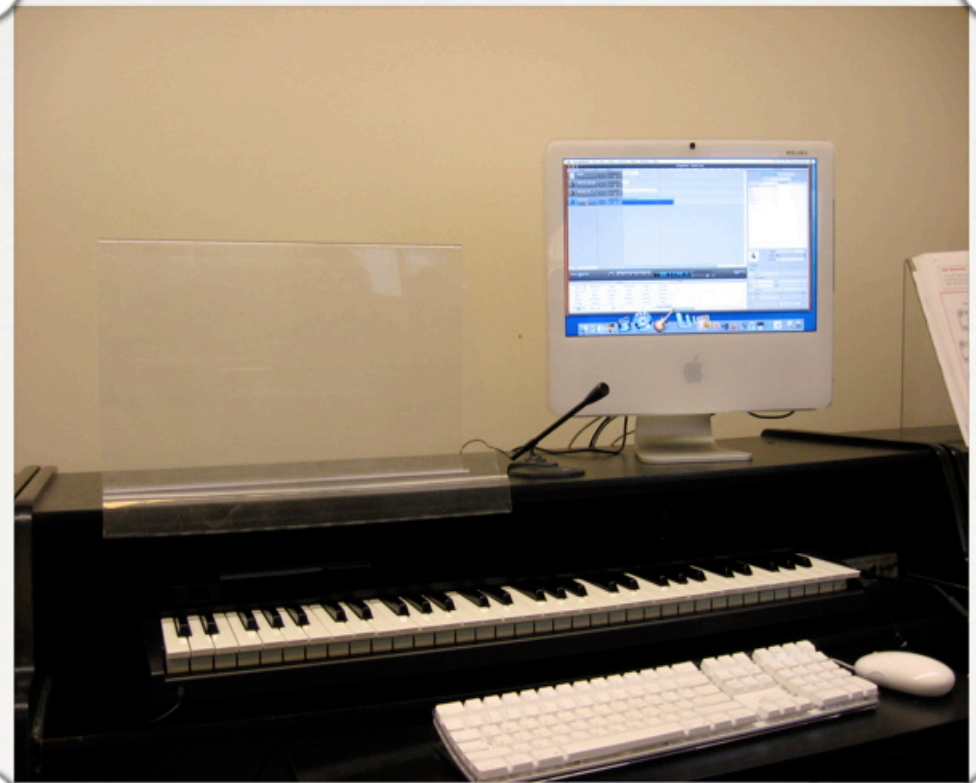
# Digital Music at Haverford High School Havertown, PA

- Courses offered at HHS (block scheduling)
  - \* Digital Recording I and 2
  - \* Electronic Piano Lab
  - \* Music Theory I and 2
- Taught by a music specialist with technology experience (TI:ME Certified - [www.ti-me.org](http://www.ti-me.org))



# Digital Music at Haverford High School Havertown, PA

- Taught in a 25 station lab
  - \* Apple iMac Computers
  - \* Peak LE / Audacity
  - \* GarageBand
  - \* Logic Express
  - \* Finale PrintMusic
  - \* Practica Musica
  - \* Band-in-a-Box
  - \* Korg X5 Keyboards
  - \* Korg GEC3





# Group Education Controller GEC3

- CLASSROOM MANAGEMENT
- Touch screen interface
- 16-32 keyboards
  - **In split mode, 2 students per keyboard**



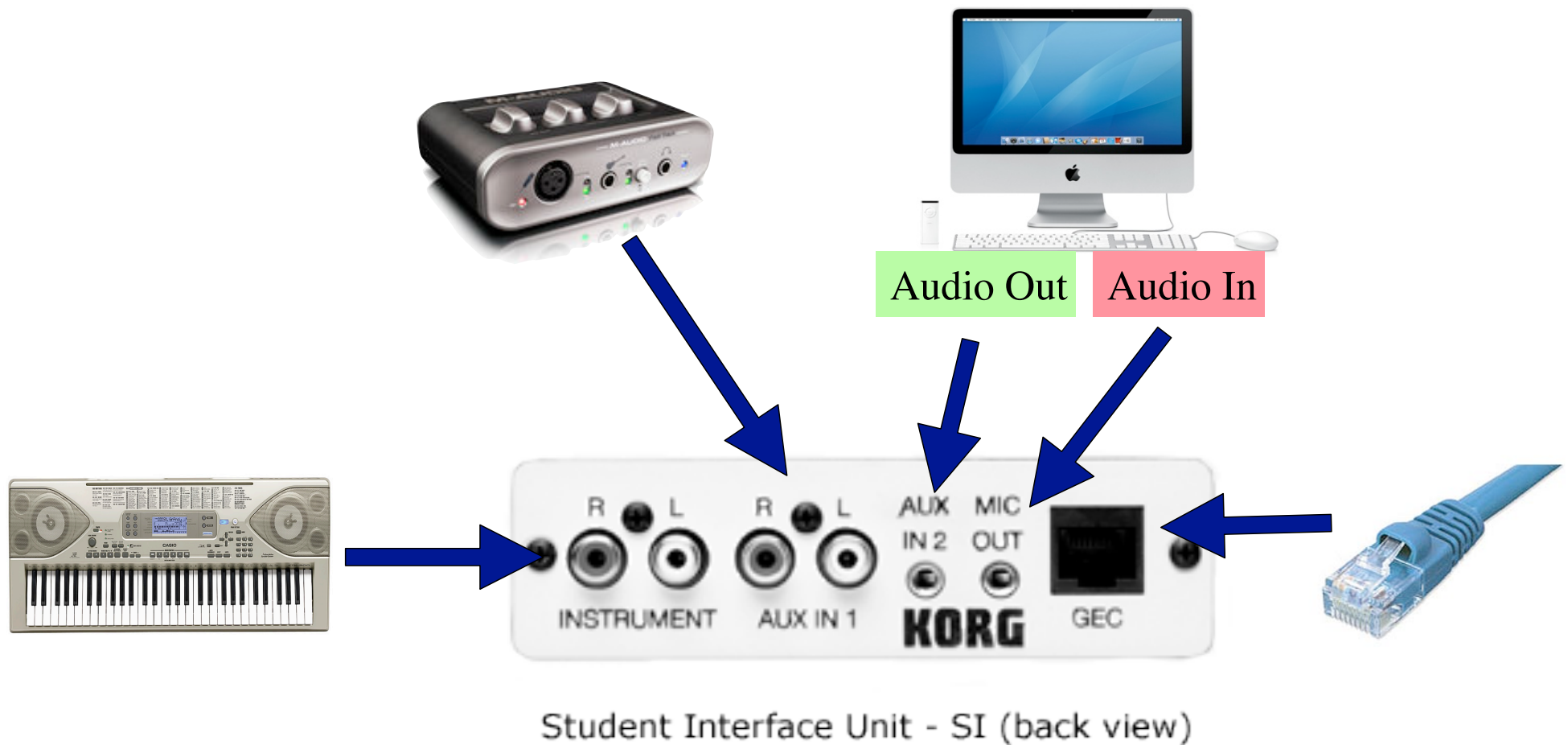
# GEC3 - Student Interface

- CALL: Students press this when they need teacher assistance
- SPLIT: 2 students per keyboard, student A uses the left half of the keyboard and student B uses the right half



Student Interface Unit - SI (front view)

# GEC3 - Student Interface



# Headphone Care

- Always use 2 hands to put on/off
- Avoid pulling on wires
- Mic is on the LEFT
- Koss will repair damaged headphones for \$14 per unit
- Suggestion: Rarely unplug
- Suggestion: Tape mic in the up position



# GEC3 - All Call

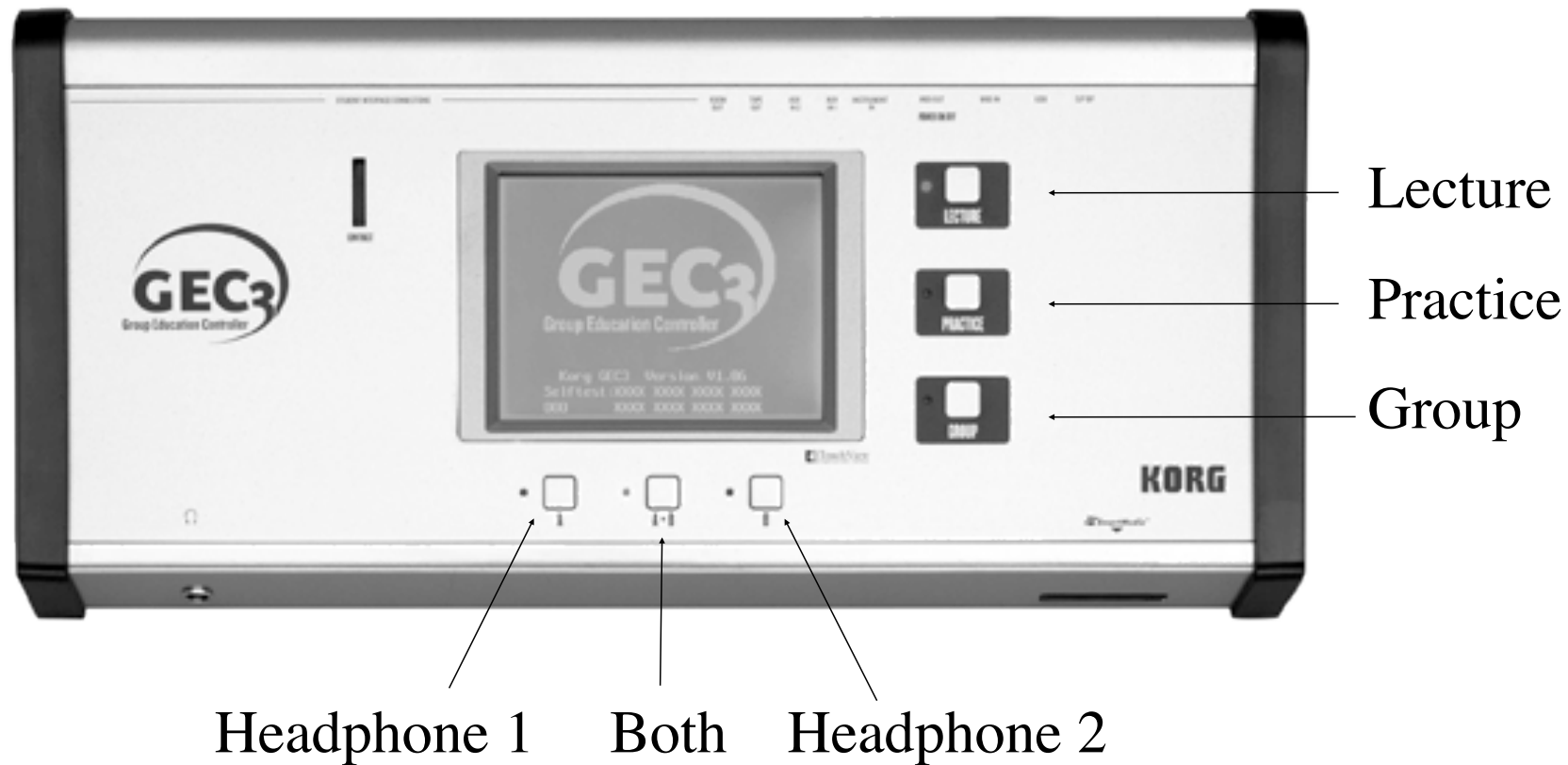
- Silences all student sound.
- Allows teacher to talk and play without student distractions.
- Uses:
  - **To avoid distraction during a lesson lecture**
  - **To signal a transition to a new topic or activity**

Lecture/theory 1			
#13:	#14:	#15:	#16:
Judy	Student14	Student15	Student16
Robie	Student14	Student15	Student16
# 9:	#10:	#11:	#12:
tiffany	Student10	Student11	Student12
rogger	Student10	Student11	Student12
# 5:	# 6:	# 7:	# 8:
sue	fred	rod	gina
veronika	jessica	phil	rick
# 1:	# 2:	# 3:	# 4:
Brad S.	Danny	johnny	ted
		thomas	vivi
Play Setup Volume Global Disk All Call			



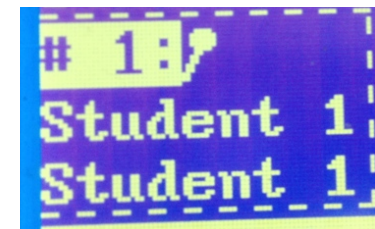


# GEC3 - 3 Main Modes



# GEC3 - Lecture Mode

- Students will hear teacher's keyboard, microphone, and computer.
- For advanced students, omit them from the lecture.
  - ☐ **Lecture Mode: Setup: Omit from Lecture checkbox.**
- Uses:
  - ☐ **Students playing along with the teacher**
  - ☐ **Teacher lecture**
  - ☐ **Students share/perform for entire class**

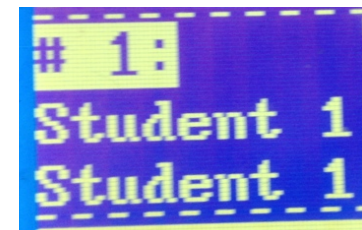


# GEC3 - Practice Mode

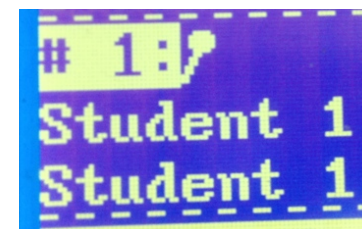
- Students will only hear their own station.
- Teacher can eavesdrop (listen without the student knowing) by pressing once on a student station.
- Teacher can work with an individual student by pressing twice on a student. Teacher and student can each hear each other's computer/keyboard and they can communicate via the headset microphone.

- Uses:
  - **Individual student practice**
  - **1 on 1 student teacher interaction**
  - **Eavesdropping**

*Eavesdrop*



*1-on-1*



# GEC3 - Group Mode

- Students will hear each other's keyboard/mic/computer
- Press the arrow (1) in the upper right corner to access the various presets (2):
  - ☐ **Duet**
  - ☐ **Quartet**
  - ☐ **Config - you can configure several custom group settings.**
- Group students together manually:
  - ☐ **Press "OFF" (3) next to a student station.**
  - ☐ **Select the group number (4).**
- Uses:
  - ☐ **Duets, trios, quartets, etc**
  - ☐ **Group jam**
  - ☐ **Students assisting their peers**

The interface consists of several screens:

- Main Menu:** A 4x4 grid of student stations. Each station has a number, a status (OFF), and a name. An arrow labeled '1' points to a dropdown menu in the top right corner labeled 'Peer Group'.
 

Group/theory 1		Peer Group	
#13: OFF	Judy	#14: OFF	Student14
#15: OFF	Robie	#16: OFF	Student15
#9: OFF	tiffany	#10: OFF	Student10
#11: OFF	rogger	#12: OFF	Student11
#5: OFF	sue	#6: OFF	fred
#7: OFF	veronika	#8: OFF	rod
#1: OFF	Brad S.	#2: OFF	Danny
#3: OFF		#4: OFF	johnny
			thomas
			vivi
- LOAD GROUP:** A screen with a list of preset options. An arrow labeled '2' points to this screen.
  - ☒ Duet
  - ☐ Quartet
  - ☐ duet 2
  - ☐ quartet2
  - ☐ Config 3
  - ☐ Config 4
  - BACK
- GROUP:** A screen for selecting a group number. An arrow labeled '4' points to this screen.
 

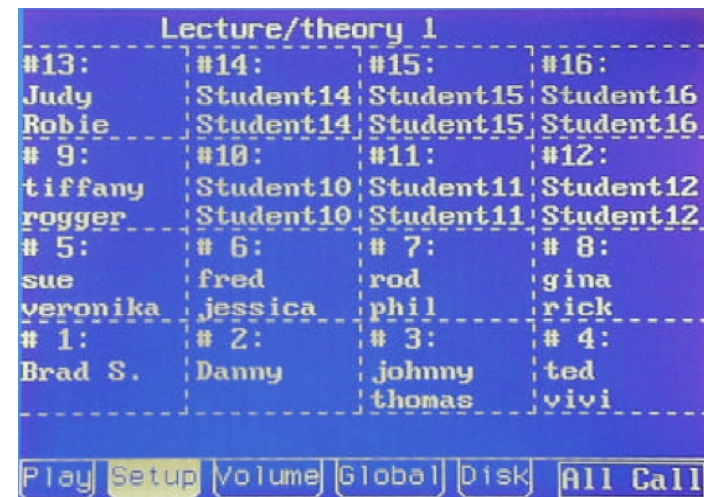
GROUP:	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
GR.OFF	
BACK	

Additional controls at the bottom of the main menu include buttons for Play, Setup, Volume, Global, Disk, and All Call.

# GEC3 - Setup Tab

You can omit one or more students from a lecture:

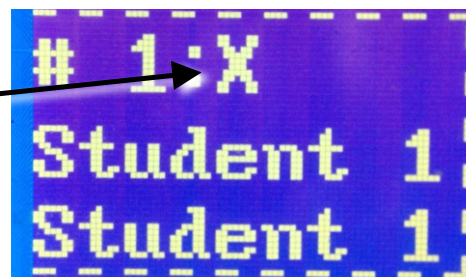
- Press Lecture
- Press the Setup tab (1)
- Press any one of the student stations
- Press the “Omit from Lecture” button (2)  
\*\*You can also name students in the same screen.
- An X will appear next to this station in Lecture mode (3).
- Be sure to reverse these steps to bring the station back into Lecture mode.



1.

2.

3.

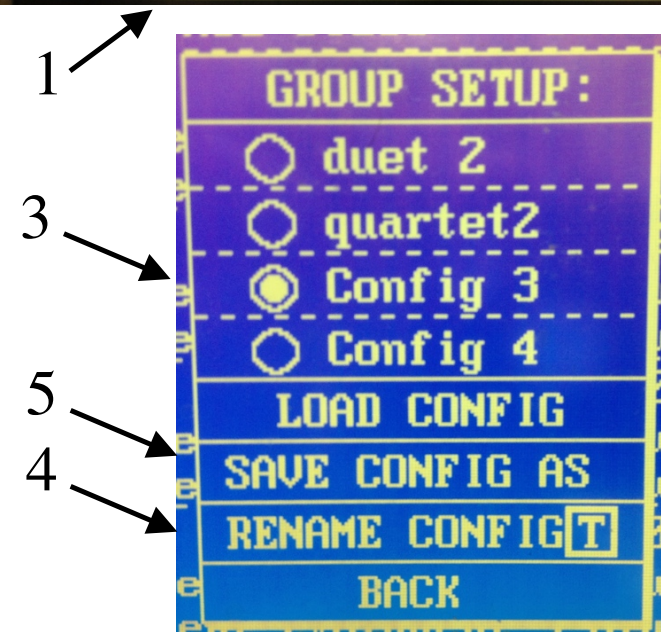
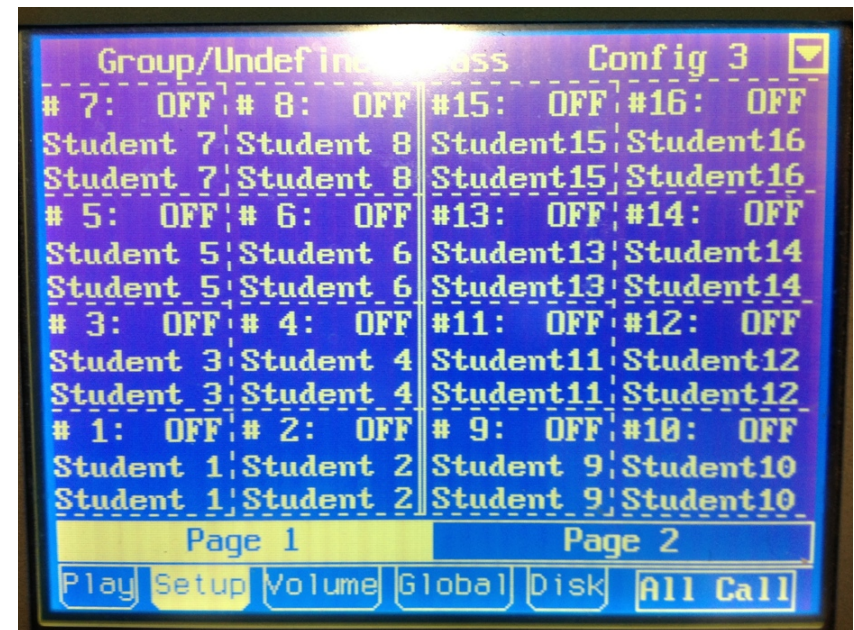




# GEC3 - Setup Tab

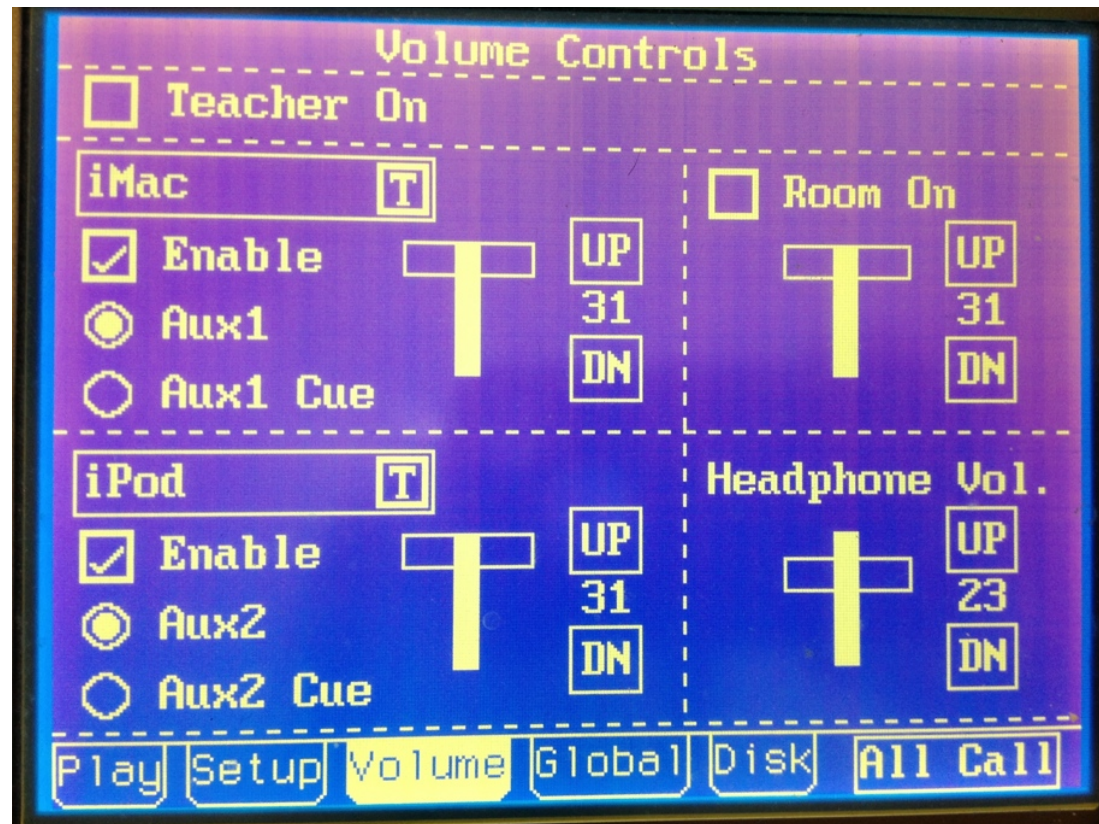
You can save a custom group configuration.

- Press Group mode
- Press the Setup tab (1)
- Create the groups as desired
- Press the arrow in the upper right corner (2)
- Select an open configuration (3)
- Select Rename Config (4), type in an appropriate name, and select OK
- Select “Save Config As” (5)



# GEC3 - Volume Tab

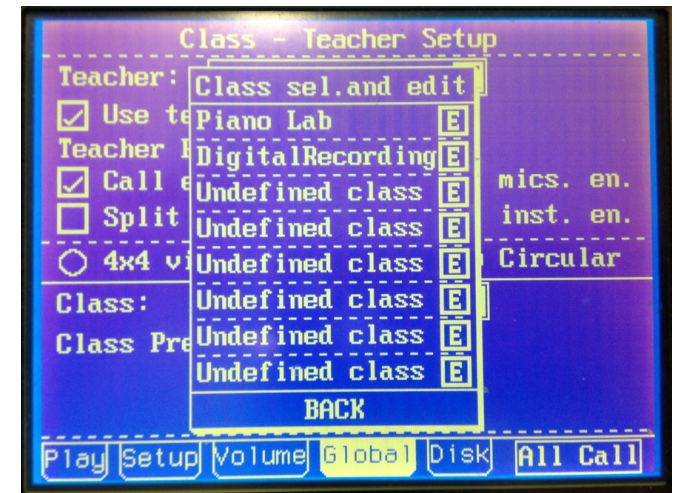
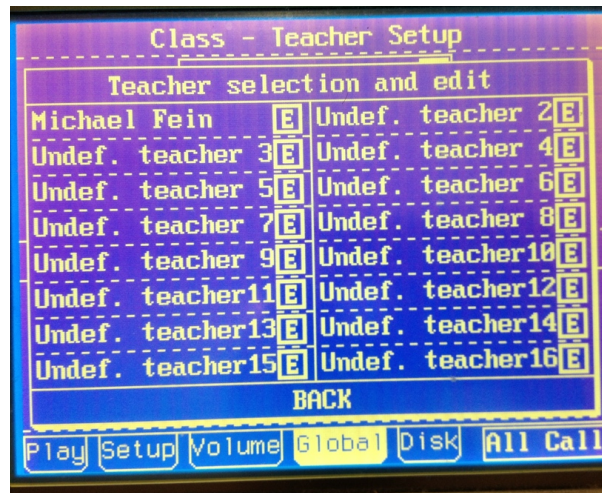
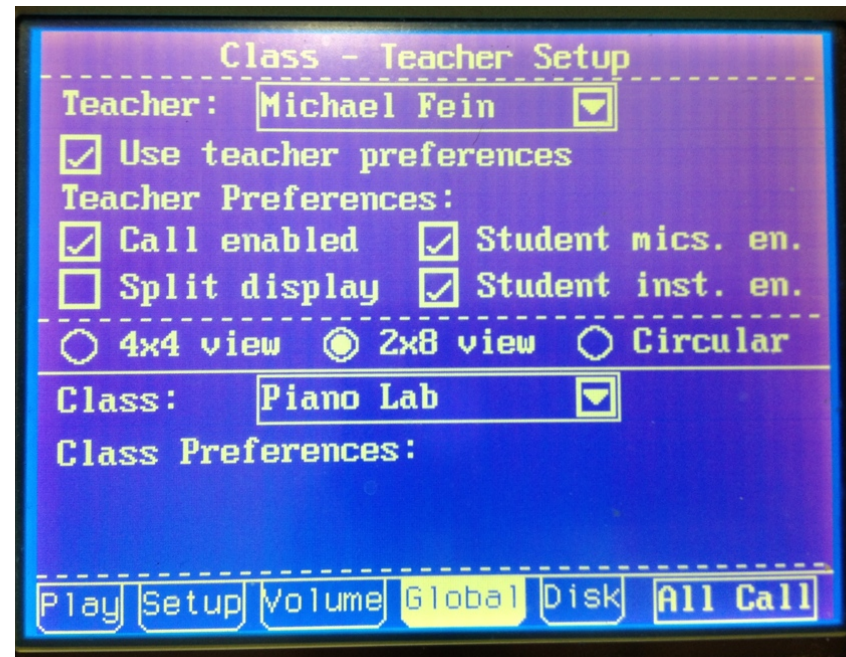
- Press Volume tab
- Turn “Teacher On” - enables or disables teacher instrument/mic. In Practice mode the default is OFF; in Lecture mode the default is ON
- Enable Aux devices (computer, iPod, etc.)
- Turn on room speakers
- Adjust teacher headphone volume





# GEC3 - Global Tab

- Press Global tab
- Enable/disable Call, Student mics, student instruments
- Adjust view preference
- Select a teacher (up to 16)
- Select a class (up to 8/teacher)



# GEC3 - Disk Tab

- Press Disk tab
- Send split sounds to specific keyboards
- Save Class Setup (teacher, class, student names, etc.)
- Save Global Setup (custom group config, volume tab settings, global tab settings)



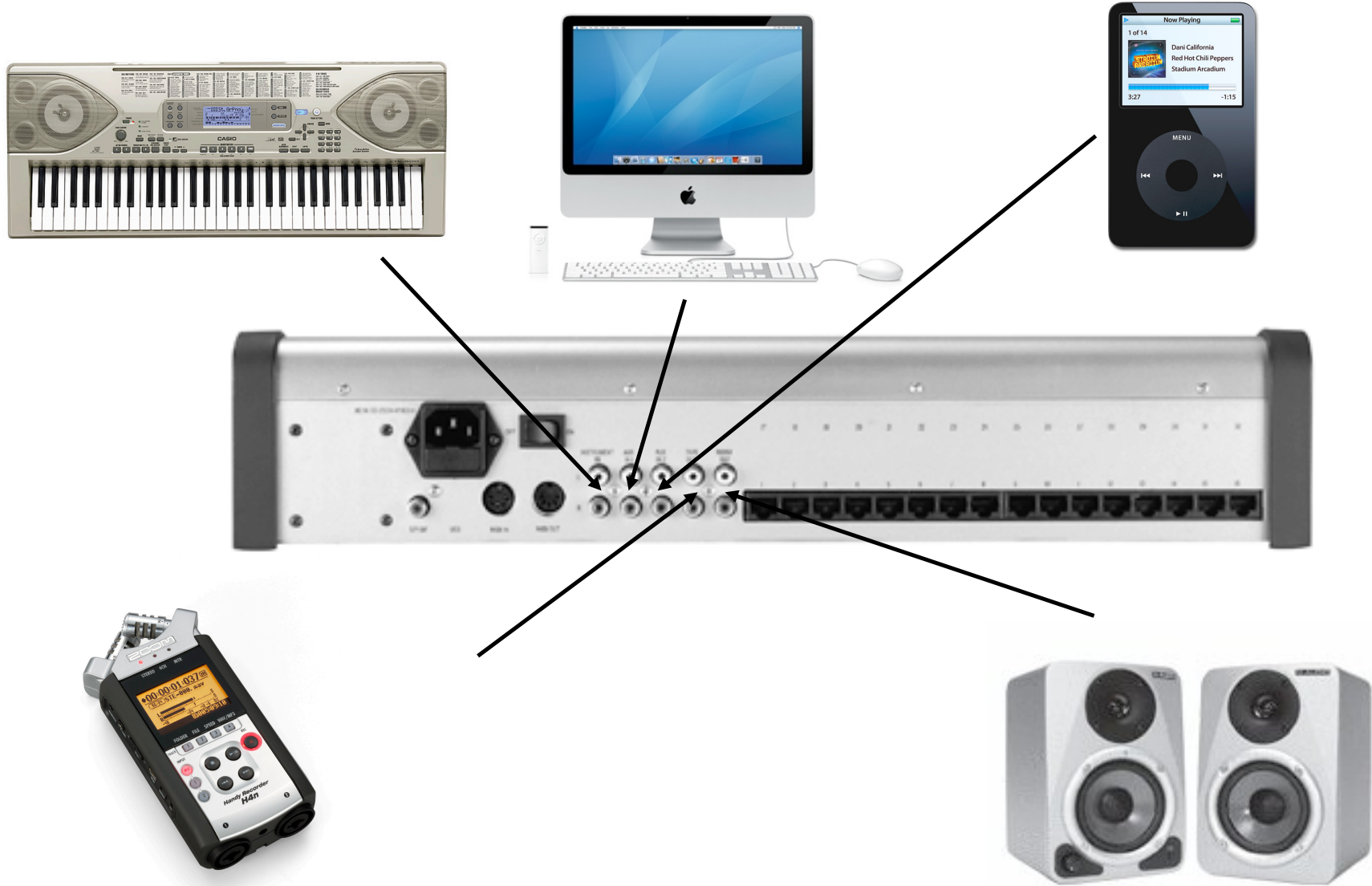
# GEC3 - Connections

- Connect teacher's keyboard to “Instrument In”
- Connect teacher's computer to “Aux In 1”
- Connect CD Player, iPod, tablet, laptop, etc. to “Aux In 2”
- Connect classroom speakers to “Room Out”.
- Connect portable recorder to “Tape Out”.





# GEC3 - Connections



# Casio CTK-6000





# Casio CTK-6000

## ■ Selecting a tone

- **Select a tone group from the tone buttons**
- **Rotate the jog wheel to select a tone**
- **Layering – select a tone, then hit Layer, then select another tone**
- **Split – select a tone, hit Split, select another tone for the bottom half the keyboard**
  - To set the split note: hold Split button, press note for split point
  - To split and layer, do the layer first, then the split, and select a split tone
- **Effects: Hold Function and press Mixer/Effect. Reverb, Chorus, DSP (lots of effects in here)**



# Casio CTK-6000

## ■ Transpose

- **Transpose half steps: Hold Function button and press -/+ keys**
- **Transpose by octaves: Hold down Layer/Octave button and use -/+ keys**
- **Detune: press Function button and press -/+ keys**

## ■ Enabling the metronome

- **Press Metronome button**
- **Adjust tempo by pressing Tempo Up/Down button**
- **Change meter: hold Metronome/Beat button and press -/+ keys**
- **Tap tempo: hold Function button and tap the Tempo Up/Tap button in the tempo you want to set**

## ■ Arpeggiator

- **Hold Auto Harm/Arp button and select 13-162 for the various types of arpeggiators**



# Casio CTK-6000

## ■ Rhythmic/Auto Accompaniment

- ☐ **Select a rhythm and hit Play**
- ☐ **To do Auto Accomp, hit the Accomp On button and play chords in left hand**
- ☐ **To add auto harmonize: press and hold the Auto Harm/Arp and select 1-13**

## ■ Song Sequencer

- ☐ **Press Song Sequencer**
- ☐ **Press Record**
- ☐ **Use arrows to select a track**
- ☐ **Press Function and Menu to turn on metronome and pre-count**
- ☐ **Press Play button (4 beats, then start)**
- ☐ **To clear a track/song – press Funct and Menu**

## ■ Initialize Settings to Factory Defaults

- ☐ **Press Function**
- ☐ **Use arrows to move down to General and press Enter**
- ☐ **Use arrows to move down to Intialize and press Enter**
- ☐ **Use arrows to move down to All and press Enter**





# Casio CTK-6000

## ■ Loading Split Data from SD Card

- **Insert SD Card in back of keyboard**
- **Hit “BANK” button under Registration.**
- **While the word “BANK” is still on the screen, hold down FUNCTION (to the right of the dial with blue ring) and press CARD (to the left of the dial with blue ring).**
- **Following will appear on the screen:**

—Regist Load—



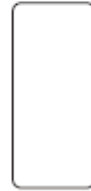


(001)

VH1SPLIT.RM7

- **Hit “ENTER” (above > key) and “YES”**

# Casio CTK-6000

- Press “BANK” under Registrations to scroll you through the 8 banks
- Press the numbers to the right of “BANK” to call up the following splits:

REGISTRATION				
BANK	1	2	3	4
				
C-8	C-9	C-10	C-11	C-12

## Registration Bank 1

- 1 – Grand Piano
- 2 – Electric Piano
- 3 – Harpsichord
- 4 – Vibraphone

## Registration Bank 2

- 1 – Marimba
- 2 – Rock Organ
- 3 – Pipe Organ
- 4 – Nylon Guitar

## Registration Bank 3

- 1 - Overdrive Guitar
- 2 - Acoustic Bass
- 3 – Violin
- 4 – Cello

## Registration Bank 4

- 1 – Contra Bass
- 2 – Pizzicato Strings
- 3 – Choir Strings
- 4 – Trumpet

## Registration Bank 5

- 1 – Tenor Sax
- 2 – Clarinet
- 3 – Flute
- 4 – Saw Lead 2



Thank you for attending this webinar!

Feel free to email me with any follow-up questions.

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