

MUSTC 123 / Hands-on Assignment #1: EQ

Objective: The objective of this exercise is to become acquainted with the effects of equalization on a variety of instruments at various frequencies.

Overview: You will be patching the left side of the CD player to one channel on the console. While listening to the CD you will make certain EQ adjustments and document the changes you hear. You will keep notes on your results during the assignment and prepare a full report.

Due date: April 27th (for the M/W classes) and April 28th (for the T/Th class), submitted online via Ohsi.

What you will hand in: A two-page summary of what you accomplished, **what you learned**, and your observations of all of the EQ changes you were directed to make.

Step 1: This exercise will be performed in **groups of two**. The first thing you need to do is form a team to work with.

Step 2: Book an available 2 hours in room 806 with the Studio E cart. Booking is done on the SCC Studios website: <http://success.shoreline.edu/scstudio>. Choose one person from your team to fill out the form with their account, and have them put the remaining three names in the 'comments' field.

Step 3: Show up on time for your session. Missing a session will result in a drop in your grade for the assignment. You must check in with the studio supervisor on duty before beginning your session. They will take your student ID as collateral. You will also need to check out the 'MUSTC 123 EQ Assignment' CD, which will be in the office.

Step 4: Roll the cart to a good spot and plug in the long extension cord. First, turn on the power strip. Second, turn on the speakers.

Step 5: Make sure the console is zeroed (all buttons in the up position, all the faders down, all knobs in default position).

Step 6: Patch the **left output of the CD player** into any **tape return input**. On the channel you patched into, set the flip switch to Tape. Send that channel to the speakers by assigning it to L/R Mix. Set the master fader to unity, turn up the speakers, and confirm that L/R Mix is selected in the monitor section.

Step 7: Zero the EQ on the channel by setting all of its controls to 12 o'clock. Turn the EQ on by pressing 'EQ IN'.

Step 8: Perform the following operations for **EVERY** track on the CD. Remember to document your reactions:

1. Using the **HI-MID filter**, select a bandwidth of 2 octaves.
2. Turn the frequency select knob all the way counterclockwise to the lowest frequency.
3. Turn the gain knob to 3 o'clock - this will give you a healthy boost. (If you want more - go for it, just be careful at the higher frequencies - you can hurt yourself and the speakers).
4. Play the CD track.

5. Slowly sweep the frequency select knob clockwise, listening to the changes in the sound. Note frequencies that particularly enhance, hurt or focus the sound. You must include these reactions in your report.
6. Play CD track again as needed.
7. **Repeat this procedure using a (9 o'clock) cut.** Listening to what remains of the sound may be as enlightening as focusing on a boost.
8. **Repeat steps 2 through 7 with the LOW-MID filter.**
9. Slowly Boost the HI and LOW fixed-frequency shelving filters all the way up and down. Record your reactions.

Step 10: If you have extra time, experiment with the EQ and console as much as you can, and let me know what you figure out. The feedback I get from you in this area is part of your grade.

Step 11: Turn off the speakers first. Then turn off the power strip, zero the console, and return the cart to the corner and place the sheet over it.