

Lesson 2

Studio Design and Monitors

Q and A

STUDENT NAME: Makela Bynum
STUDIO NAME: House
NAME OF MENTOR(S): Take

1. Primary factors governing control room acoustics are: (pages 79-80)
 - a. Acoustic isolation
 - b. Symmetry in control room and monitoring design
 - c. Frequency balance
 - d. Absorption
 - e. Reflection
 - f. Reverberation
2. In comparison, the amount of isolation between the control room and the studio should be the same as between the studio and outside. (page 83)
3. The small room containing two doors between the control room and the studio or exterior areas, is called a sound lock ~~iso room~~. (page 89)
4. The phenomenon that occurs when a sound reflects back and forth off a parallel surface is called standing waves. (page 98)
5. Diffusers are acoustical boundaries that reflect sound back at various angles, breaking up their sound energy. (page 99)
6. Low frequency attenuation devices are known as bass traps. (page 104)
7. A device that is used to analyze the acoustics of a room is called a spectral analyzer (page 538), and the signal that this device generates is called pink noise.
8. To prevent any signal from being applied to a specific speaker, a crossover network is used. (page 526)
9. In active crossovers, each line level audio signal is split into various frequency bands, which is then fed into its own power amp and then the speaker. (page 528)
10. Speakers with only one crossover are called a two-way system. (page 526)
11. Monitor speakers that have an amplifier built in are called actively powered. (page 526)
12. A smaller speaker placed near the console's meter bridge is called a nearfield monitor. (page 540)

Have a chat about what it means to have a good sounding room. Discuss at length with your mentor.

NOTES:

Things to consider when constructing a studio:

- Location
- Size
- Available space
- Home/Warehouse/Ground up building

Less dense products reduce the transfer of sound from one side of the wall to another

(Could replace steel studs for wood)

(Glass in the control room (inside) should be tipped or angled down toward the floor to help w/ the reflection of sound and light)

If possible use laminated glass (it will result in an effective thickness (about 2x) giving more isolation)

Choose monitors that reproduce an even response (minimal peaks and dips)