

Snow's AE 2 Final

1. List four basic functions a compressor can do on a track.

Threshold, Attack Release, Ratio

2. What is the difference between "open cell" and "closed cell" insulation?

Closed Cell: Denser, more water resistance

Open Cell: Lighter

3. What is the main advantage for using a stereo pair of mics over the hammers of a grand piano instead of a single mic set in the middle?

It captures more of the range of the instrument.

4. What is a PZM mic, and how would you use it to mic a piano?

PZM: pressure zone mic

Place the mic under the piano lid.

5. What is the proper order for powering up a Pro Tools HD system including the outboard gear and peripherals?

*harddrive, MIDI devices, ProTools
interfaces, computer, speakers

6. What are the primary differences between large and small diaphragm microphones?

Small: Higher noise, Low sensitivity, Wide
frequency range

Large: Lower noise, High sensitivity, Narrow
frequency range

7. What are three reasons why it is important to synchronize all digital devices in an audio system to a master clock?

- *identifies when each sample should be recorded
- *identifies when each sample should be played
- *identifying each encoded audio channel in a multichannel system

8. **(worth 5 points)** List the 5 things to keep in mind when setting up headphone mixes that we discussed.

- *Quality of the headphones
- *Check Polarity
- *Keep Mix Simple
- *Create Environment
- *Listen to the headphone mix yourself

9. What are four characteristics of a tube mic?

- *Warm sounding
- *Distortion people like
- *Higher circuit noise
- *Greater chance of damage

10. How many microphones are needed, and what is the proper way to set them up for Mid – Side stereo micing? Be sure to include polar pattern and placement to the sound source.

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cardioid pointing forward (middle)
fig-of-8 angled and 90 degrees (side)

11. What are four characteristics of a ribbon mic?

- *Good High Frequency Detail
- *Low noise floor
- *Warm smooth sound
- *Typically fig-of-8 polar pattern

12. What are the two main sonic advantages of micing the underside of a snare drum?

- *add more hit
- *create full sound

13. Whys is it important to maintain an equal height distance from the drum set with all overhead mics?

To make sure they're in time with eachother

14. How do we lessen the bleed from the surrounding drums when micing a specific drum?

Put the mic closer to the head

15. What are the steps taken for Mid – Side Decoding?

- *separate mid and side channel
- *make 2 copies of the side channel
- *invert phase of one copy
- *pan copies of side channel hard left and hard right

16. Why do you have to “reverse” the phase of the microphone placed underneath the snare drum when micing both the top and the bottom?

So you don't have phase issues with the top microphone

17. In a three mic system on an acoustic, list where you would place each mic and list a mic commonly used for that spot.

Neck(small), Hole(med), Body(large)

18. How do I position the mic on a drum in order to get more of the drum tone?

Angle the mic slightly instead of directly at drum

19. How do I position the mic on a drum in order to get more of the stick hitting the drum?

Aim mic directly at the head of the drum

20. How do you assign multiple outputs to a single track in Pro Tools?

Control-Click output path

21. What is the quick key for copying track settings of all selected tracks to the sends of those tracks?

Option

22. Why would you place two microphones on the top speaker of a Leslie cabinet?

Treble

23. What is the difference between coated and non-coated drum heads?

Coated: rigid stick definition
Non-Coated: more resonant

24. What are the three sources available on the SSL preamp section.

Mic Line/Tape, Sub Group

25. Which drum head is used for stick definition?

Coated

26. Which drum head gives the tone of the drum?

Uncoated

27. What are two benefits of using region grouping when editing drums, and what are the quick keys to both group and ungroup regions?

Command Option G
Command Option U

28. How do you lessen high-end frequency's using only mic placement?

Move mic closer to source

29. How does the distance from the source effect the sound when micing?

Far: brighter sounding
Close: bassier sounding/ less bleed

30. In the SSL patch bay, which strip sends to Pro Tools inputs?

MultiTrack Sends?

31. Describe how to route a bass so that you can record both a clean signal and send a signal to the amp at the same time.

Bass --> DI --> Amp, Mic Pre

32. In the SSL patch bay, describe how to route the signal to a compressor using an insert of a channel.

*Route to Insert Send, Compressor, Insert Return

*Press "In"

*Choose Pre/Post EQ

33. List five characteristics of a solid-state preamp.

*faster transient response

*no distortion

*better high frequency response

*low maintenance

*operate more consistently as gain is applied

34. In the SSL patch bay, which strip sends signal to the external stereo switches on the master section?

Multi-Track Returns to Stereo 4 Returns
(hit external to monitors)

35. Define "true bypass".

signal goes directly from input to output
jacks

36. What are the three most popular models of grand piano used in recording?

Yamaha, Steinway, Bosendorfer

37. What is “re-amping”?

recorded signal is routed back out of the editing environment and run through external processing or reverb chamber (way of adding effects)

38. List four things DI Boxes can do.

- *level matching
- *balancing
- *minimize noise
- *minimize distortion

39. Describe the sonic differences between placing the guitar amp on a wood floor versus suspending it in the air via chairs or something of that nature? Be sure to list characteristics of both.

More bass on floor

40. **(worth 5 points)**List 5 things to keep in mind while technically critiquing a final mix.

- *no clipping
- *vocals in mix
- *balanced sounds
- *overall level
- *panning

41. How would you place the mic on a guitar amp in order to achieve a bright and “in your face” guitar sound?

In the center of the speaker, and further back

42. What are five benefits we get from using transformers?

can be used to block radio frequency interference or the DC component of an audio signal, to split or combine audio signals, or to provide impedance matching between high and low impedance circuits

43. Define the “soft knee” setting on a compressor.

Controls whether the bend of the response curve is angled or curved

44. Define the “ratio” setting on a compressor.

Determine how much compression you are going to apply to a signal that goes over the threshold

45. **(worth 6 points)** List the frequency ranges for the items listed below:

- a. Stick hitting a cymbal or drum head
- b. The “boxy” sound
- c. Beater of a kick drum
- d. Presence/air
- e. Punchy
- f. Sub bass

