K-AMP Articles from HEARING INSTRUMENTS

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Some questions and answers concerning the K-AMP® circuit

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he number of manufacturers incorporating K-AMP® circuitry into their hearing instrument line has increased significantly, since it was first introduced into the marketplace in the spring of 1990. Similarly, the number of dispensers fitting patients with K-AMP instruments also continues to rise. While most dispensers report positive results with instruments containing K-AMP circuits, there are some who have been disappointed. Upon further analysis, there is often a logical reason why these instruments were rejected. These reasons sometimes reflect a lack of understanding on the part of the dispenser regarding the capabilities and limitations of K-AMP circuitry. Etymotic Research, designer of the circuit, recently submitted a list of 41 yes-no questions which are frequently asked. In an effort to augment dispensers' knowledge of K-AMP instruments, the Fitting Forum challenges you to take this K-AMP quiz. Anyone who gets them all correct should call Etymotic Research for a job!

- 1. Is the K-AMP instrument designed to fit mild to moderate losses?
 - 2. Will the FFR option fit flat or reverse slope audiograms?
 - 3. Will the LFC control reduce low frequency response?
 - 4. Can I adjust gain at low level with the TK control?
 - 5. Is the TK trimmer recommended for all fittings?
- 6. In the standard response (non-FFR) K-AMP instrument is 3 kHz boosted in the 2 cc coupler response?
- 7. Is the 3 kHz boost present for both low level and high level sounds?
 - 8. Does the 3 kHz boost disappear for high level (loud) sounds?
 - 9. Can a large K-AMP vent be used without getting feedback?
 - 10. The pin hole pressure vent avoids feedback. Are there others?
 - 11. Can I use Select-A-Vent to balance occlusion effect in feedback?
- 12. When feedback is present with the K-AMP instruments, is it a loud sound?
- 13. Does K-AMP instrument compression affect the loudness of the feedback?
 - 14. Should you check for K-AMP feedback in a quiet room?
- 15. Should a dispenser listen near the client's ear to detect feedback?
 - 16. Is the volume control the best way to control feedback?
 - 17. Is the TK control useful for feedback?
 - 18. If the TK control does not stop feedback, is there another way?
- 19. Are foam E-A-Rings a sure way to identify the source of feedback?
 - 20. Is the K-AMP instrument ideal for recruitment problems?
 - 21. Will the K-AMP instrument solve tinnitus problems?

- 22. Can a telephone pick-up coil be used with a K-AMP?
- 23. Can I fit a K-AMP instrument on one side and a linear instrument on the other?
 - 24. Is it best to fit compression instruments binaurally?
- 25. Is a one-third volume control setting normal for "unity gain" above 90 dB SPL?
- 26. Will ANSI measurements (at 50 dB SPL) give true gain for K-AMP?
- 27. Does the K-AMP circuit (with TK control at max gain for soft sounds) start compression above 40 dB?
- 28. Does the K-AMP instrument reduce noise by reducing frequency response?
 - 29. Does the K-AMP instrument reduce or eliminate noise?
 - 30. Will I understand speech better in noise with wide bandwidth?
- 31. Does the K-AMP instrument amplify loud noise (90 dB and above)?
- 32. At 90 dB SPL, will the K-AMP instrument return to flat response?
 - 33. Does the term "TILL" mean Treble Increases at Low Level?
 - 34. Does the damper screen also act as a wax trap?
- 35. Will the K-AMP instrument work properly even though the screen is waxed?
- 36. Must I follow the manufacturer's instructions to replace the screen?
- 37. Is the screen location in the tube of the High Fidelity K-AMP critical?
- 38. Does proper screen location remove all peaks except one at
 - 39. Does the peak at 3 kHz replace the lost ear canal resonance?
 - 40. Will I see this peak on the 2 cc coupler measurement?
 - 41. Will I see this peak on the probe tube insertion response?

Readers can find the answers to these questions in the box below. The Fitting Forum would like to hear from both readers who are having good success with K-AMP hearing instrument fittings and also from those who are having fitting difficulties. If you have additional questions on the K-AMP, the Fitting Forum also would like to hear what they are. \square

Answere: 1, Y, 2, Y, 3, Y, 4, Y, 5, Y, 6, Y, 7, N, 8, Y, 9, N, 10, Y, 11, Y, 12, N, 15, Y, 16, Y, 19, Y, 20, Y, 21, Y/N, 22, Y, 23, N, 24, Y, 25, Y, 26, Y, 21, Y/N, 22, Y, 33, Y, 36, Y

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