



? "Test for Quick Audio Men" English Questions 03

Write down quickly a numerical value or a slogan.

UdK Berlin
Sengpiel

10.96
F + A

1. A sound pressure level L_p in dB is based on the sound pressure p and the reference sound pressure p_0 . **a)** How great is the reference sound pressure p_0 , which roughly corresponds to the threshold of hearing? **b)** How is the equation for the sound pressure level L_p ?
2. The ARD studio level is +6 dBu, which is 1.55 Vrms. (European studio level.) At what decibel value is the international studio level (USA) and to which voltage does it correspond?
3. How much is the rear attenuation of a microphone with hypercardioid pattern (directional characteristic)?
4. What do you understand by the abbreviation DVD?
5. At the input terminals of a (let us say) "9 ohm" loudspeaker are 30 volts from a 1 kHz sine wave at 1% total harmonic distortion (THD). What is the electric power of the loudspeaker?
6. Which sound power P_{ac} will this loudspeaker (from question 5) emit at maximum?
7. What is the output resistance R_{out} and what is the output voltage V_{p-p} of a digital AES / EBU = AES 3 interface?
8. Which type of microphone with which polar pattern is most sensitive to air movements and therefore not suitable for outdoor use?
9. What microphone type is against pop and wind noise the least sensitive?
10. How great is in natural hearing, the maximum delay difference Δt between the left and right ears (interaural signal differences) when hearing clicking signals?
11. What value must the time difference Δt between the loudspeaker signals (interchannel signal differences) have, so that at equal levels, the phantom source is just located from the direction of a loudspeaker?
12. A particular condenser microphone has a transfer factor of 10 mV/Pa. The sensitivity is related to 1 volt microphone voltage in dB at a sound pressure level of $L_p = 94$ dB. What value has the sensitivity of the microphone in decibels?
13. A mixer gets a 1 kHz test signal. The display of the correlation meter shows "-1". How much is the "phase shift φ " between the left and right channel?