

SPEAKER IMPEDANCE

Modern loudspeaker systems have nominal impedance of 4, 6, or 8 ohms. These ratings are not related in any way to quality or performance capability. However, a speaker's impedance does affect the "loading" of a receiver or amplifier to which it is connected.

Any receiver or amplifier of decent quality can drive a single pair of speakers, regardless of the speaker's impedance rating, and regardless of the way in which the receiver's power output capability is specified. Often the receiver's power is specified only with 8-ohm loads, but this does *not* mean that 4-ohm speakers shouldn't be used. In fact, a receiver can usually deliver more power to a pair of 4-ohm speakers than to 8-ohm speakers. Impedance "matching" is neither necessary nor advantageous when one speaker per channel is used.

It is only when more than one pair of speakers must be driven at the same time by an amplifier or receiver that speaker impedance becomes a matter of concern. Usually, two pairs of 8-ohm speakers can be used simultaneously on any receiver. Many receivers and amplifiers of recent design* are noted for their ability to drive low-impedance loads well, and two pairs of speakers of *any* common impedance rating can be connected to such units with good results. Some receivers, however, require special external switching circuits to drive two pairs of speakers having other than 8-ohm ratings; it is for these systems that the enclosed circuit diagrams are intended.

*A discussion of receivers in *Stereo Review* (July 1986, p.84) includes the advice "Be wary of a receiver whose amplifier section doesn't have a 4-ohm rating."

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