

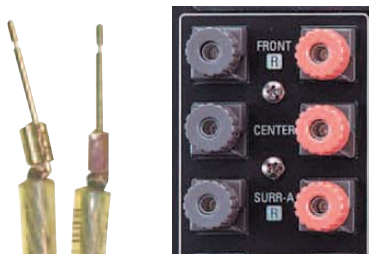
## AUDIO SPEAKER

Whatever type of speaker connection you use, be sure to follow the color-coding on the output and input terminals to maintain consistent polarity for all your hookups. (And if you use anything but bare wire on the ends of your speaker cables, the plugs should be color-coded as well.) That is, always connect the receiver or amp's plus (+) output terminal to the speaker's + input terminal, and the minus (-) output terminal to the - input terminal, for *all* the speakers in your system. It won't damage your speakers or electronics if you get one or two connections wrong, but those speakers will be out of phase with the others, and bass performance and imaging quality will suffer significantly.



**Spring-clip** Various types of spring-clip speaker outputs are found on less-expensive receivers and amps (and on the inputs of some entry-level speakers). They all work more or less the same: press the

button or lever, insert bare wire from the stripped end of a speaker cable into the opening (twist the wire so the strands stay together), release the button, and the spring-loaded clamp grabs the wire. Since the internal clamp is usually an edge-to-edge affair, most spring-clip connectors make electrical contact over a comparatively small area. Nevertheless, they're usually adequate for speaker connections when maximum power levels are below 100 watts or so.



**Multiway binding post** Binding posts accept nearly any form of speaker wire or cable and make a solid contact over a large area. After twisting the strands tight, you insert the wire through the horizontal hole in the post and clamp it under the knurled knobs by turning them down. If the wire is terminated with U-shaped spade lugs, the knobs spin down to hold

these flat at the bottom of the posts. Wire with pin terminators (shown) is connected through the holes and the knobs tightened against the pins. And if your speaker wires have banana plugs on the ends, simply plug these into the holes on the ends of the binding posts, which are designed to take them. Now, that's versatility.



**Banana plug** Named for its slightly bulging shape, this easily inserted plug makes a large-contact-area connection as it's pushed home into its corresponding jack, usually on the end of a multiway binding post. That makes it the preferred connector for high-power hookups, as from a receiver or power amplifier to speakers. Occasionally banana plugs are molded into pairs called dual bananas, though not all gear (especially speakers) accommodates their standard spacing.