

thing will work right the first time.

Most do-it-yourselfers want something more than a freestanding system, but something less than fully built-in. A stealth flat-panel installation with free-standing speakers is one intermediate step. (See TPV Issue 64 on how to mount flat-panels.) Another intermediate step to consider is a ceiling-mounted projector. A common semi-built-in approach is freestanding front channel

write on it with a Sharpie marker.

The Right Stack in the Right Rack

The easiest way to hook up a system is to put all the components in a vertical rack with casters so that the rack can be turned or moved even when fully loaded. Moveable racks can be loaded and connected in the comfort of open space and then rolled into a closet. Place the most-accessed components where they are easi-

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speakers, freestanding subwoofer, and in-wall surrounds. Getting the wiring to the surrounds can be tricky. (See TPV Issue 62 for steps to demystify wiring.) Such efforts are best undertaken by homeowners with construction skills and electrical knowledge.

Make a sketch of your system and a punch list of smaller tasks, then check each one off as it's completed.

AVR: the Heart of the System

All cabling connects to your AVR (audio/video receiver), your system's switchboard and power plant. The eventual dominance of HDMI (High-Definition Multimedia Interface) cabling will simplify home-entertainment systems the way USB has for computers, but for now you'll probably have a mixture of analog and digital. Label each end of each cable as you go to prevent mistakes. Speaker cable for custom installation has an external jacket in white or a neutral color. You can

est to reach. It's always convenient when disc players are at waist-to-chest height. Components operated solely by remote, including AVRs (once installed) can sit anywhere. For stability, heavier pieces should go on the bottom.

To do a proper hookup, you really need to see the back of all your components, but many homeowners create huge obstacles for themselves by insisting on sealed cabinets. This necessitates overly long cables and shoving the components into the cabinet in the hope that nothing gets dislodged in the process. Cramped quarters and bunched-up cables interfere with ventilation.

The most nightmarish installation by far is installing A/V components in antique armoires. There's little space inside, and owners of such furniture are loath to drill into them or open the backs for easy access. Hookups in such pieces involve flashlights, handheld mirrors, the overuse of inadequate English profanity, and

in do-it-yourself circumstances, the threat of divorce and the need for counseling. Just say no.

Final advice: Recruit a patient helper. Test the system in the open before closing it up in a closet, cabinet, or (God forbid) antique armoire. Standard practice among custom installers, this precaution keeps return visits to a minimum. Provide adequate ventilation for your components. (Highly recommended: Parasound's Z-Breeze fan.) A programmable universal remote such as the MX-850, with IR flasher unit, will let you operate everything unseen. Enjoy the movies! **TPV**

Calibration Time

Disc player within reach? Everything respond to the remote? It's time to calibrate.

Better AVRs offer auto calibration. Plug in the supplied microphone, place it at the primary listening spot and follow the on-screen instructions. Loudspeakers with limited bass should be set to **SMALL** in the set-up menu; those that reach below 40Hz can be **LARGE**. In a few passes with test tones, the AVR finds distance to each speaker, sets playback levels, and may apply frequency-response correction. Exiting setup stores the settings.

Most auto-calibration works well, except for subwoofers. Put the sub in phase with the front channels, with level/crossover points set so it blends seamlessly.

AVRs without auto-cal have manual setups. Measure the distance from each speaker, enter it in the program, then set levels with a sound-pressure meter. You're ready to rock'n'roll.