

The Blair House Theater Project

The client wanted the most accurate audio and video reproduction possible, with customization that would make it simple to operate. Conduit was installed to the projector, the center of seating, and the theater rack, as well as a conduit pathway back to the control room for future upgrades. After installing whole house and outlet surge protection, followed by power conditioning and 12-gauge dedicated Romex installation, then insuring the receptacles were screwed not "stabbed," matched length speaker cable (14-gauge) was run to all speakers. The builder then installed custom-built acoustic panels with trim work after which the large speakers were inset behind, and covered with matching acoustic fabric. The subwoofer and center speaker were placed in a hollow faux stage below the screen in order to position them properly (for reduction of standing waves and low frequency resonance). The theater sources are as follows: the PS3 sits between the theater chairs, and is connected by remote input runs at the base of the rear platform; next, two high definition cable boxes, a camera system, and a media center computer are switched from a remote location in a control room (located under the stairwell). These latter four sources are controlled by an MX3000 touch screen (set up in whole-house control mode.) When the "Theater" room is selected, the user selects macros of choice i.e. "Watch DVD" or "Watch Cable." These macros contain programmed on-commands to control all necessary gear so the user never has to actually press "on" buttons for each individual component. The HAI home automation system monitors five sensors: the motion detector in hall outside the theater; the projector status; the amplifier status; the theater door; and the doorway (flex sensor under the threshold). This is unique because most theater projects don't use all these sensors. There are, also, the typical automated lighting scenes such as: lights off when play button is pressed; lights on 50% when pause button is pressed; and lights on when system shuts down. Upon entering the windowless theater, the lights come on as the flex sensor is triggered. Since the system "knows" the status of gear, the hall light or interior theater lights will not come on if the projector is on. The rear speakers will sound the doorbell/page, driveway alert, and phone alert. When the cameras are accessed to view door or driveway, a macro will pause the DVD/Blu-ray playback until camera viewing is exited and playing resumes. The custom-built A/V equipment rack, located in an adjacent storage closet, is easily serviced because of the color-coded cabling cut to proper lengths, and finished with matching heat shrink. There is proper ventilation between the gear to keep machinery at optimum performance. This system was audio and video calibrated after 30 hours of run time. Describe the specific needs and desires of the customer for the job, including any special requirements that were addressed by your system design and integration.

The client's only real request was for an awesome theater. This one surpassed his request. The screen was selected for its high gain and high contrast. The speakers deliver the intensity of sound he never dreamed possible. The versatile MX3000, used to control the theater, was programmed to use all of its whole house control capabilities, e.g. if any of the four touch screens owned by the family is unavailable, any of the other three can be used just the same in any room. Because she was concerned with decor, the client's wife chose the leather for the Cineak chairs, and the color of acoustic fabric which encloses the panels and inset speakers to go with her choice of carpeting. All the "heavy" equipment is tastefully hidden from view so the overall aesthetic quality of the theater is preserved. Smaller equipment is painted to match the walls to which they are attached. And because the acoustics are limited to the interior of the room, the owner's children can play the PS3 all night without disturbing others.