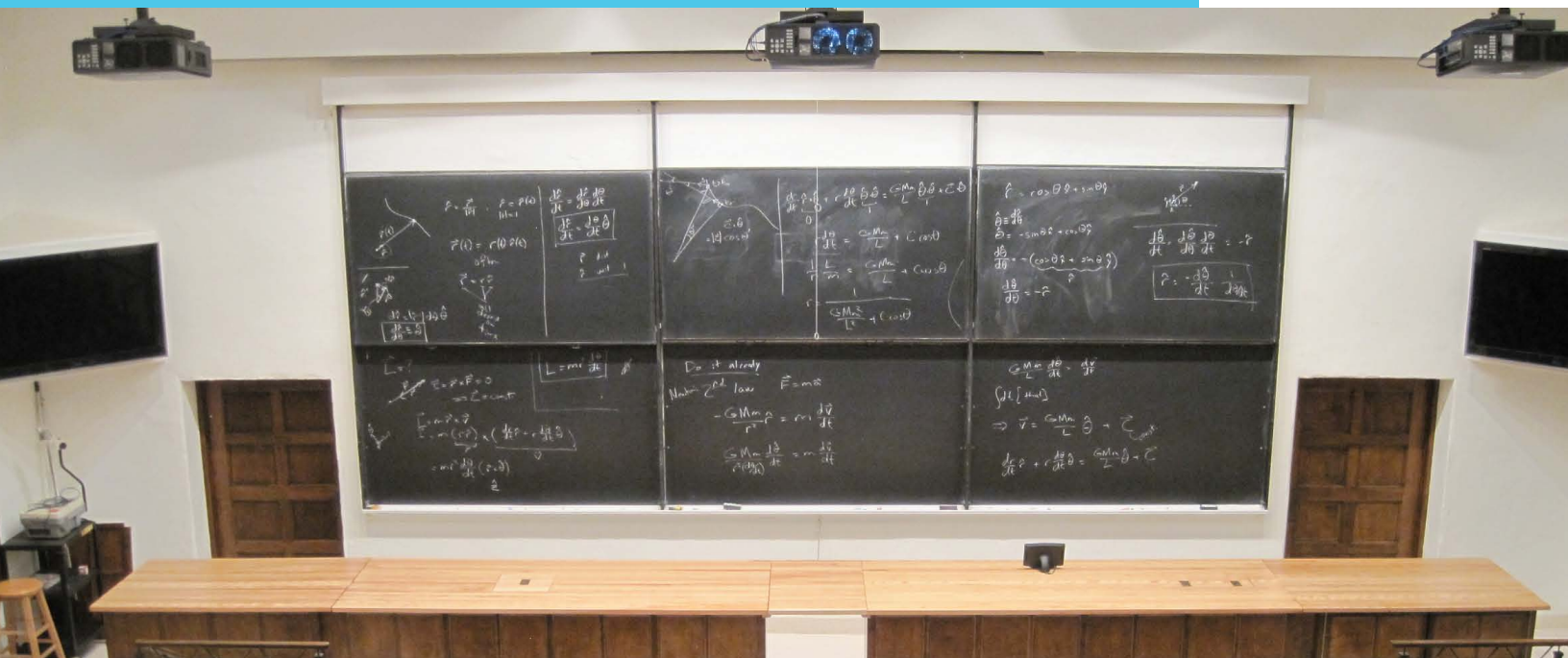




CLEARTECH

Case Study: Caltech - Richard Feynman Physics Lecture Hall



Challenge

Caltech is a World-renowned private research university based in Pasadena, California, noted for its strong emphasis on science and engineering. In 2011, the university remodeled the aging Richard Feynman Physics Lecture Hall, originally built in the 1920's. The lecture hall is considered an historical landmark because of its age and significance in the academic world, as influential physicist Richard Feynman delivered lectures in the hall, as well as Albert Einstein. During 1961-1963, Feynman delivered lectures in the hall which came to comprise the revered physics textbook, *The Feynman Lectures on Physics* (1964). Along with the remodel, there was a need to replace the hall's antiquated audiovisual system. To modernize the hall's AV system, Caltech decided to outfit it with a new display and control system.

Solution

ClearTech Media (CTM) was chosen to work with the project architect, PBWS, to design and implement an AV system in the newly remodeled Richard Feynman Lecture Hall. The display system features 3 ceiling mounted 6,000 lumen WUXGA projectors. Two of the projectors aim at 60"x96" 16:10 format electric projection screens, while the third aims at a 108"x108" square format manually operated screen. A 55" LED display is wall mounted in each corner at the front of the hall, facing the audience. CTM integrated an existing audio system with surface mount speakers which were in good condition. To bring to hall to ADA standards, CTM installed an assisted listening system with 10 receivers. For ultimate flexibility and convenience, CTM installed wall plate input connections in multiple locations around the instructor area, including connections for HDMI, VGA, USB, RGBHV and Mini-TRS.



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CTM installed a digital matrix multimedia switcher so that each of the hall's sources could be routed to any and all displays. Sources include a dedicated PC, Blu-ray player, document camera and devices connected to wall plate inputs. The system is controlled primarily by a 9" Crestron touch screen, and also by two wireless touch panel controllers. The control system allows users to fully control all functions of the AV system, including on/off modes, volume control and selection and routing of sources. CTM worked closely with the client to define the requirements of the end users for using the touch panel controls in relation to lectures. The touch panel codes underwent multiple revisions so that they were fine tuned to meet the client's needs.

Outcome

The remodeling of the Richard Feynman Physics Lecture Hall greatly improved the quality of the hall as an instructional space, while following all standards established for historical landmarks. The new display and control system has empowered professors to deliver more effective lectures and presentations. CTM worked with both the project architect and the client to configure a system which perfectly met all of the client's needs and the client was very pleased with the result.