



Crestron DigitalMedia™ and Green Light® Lighting Control Transforms Englewood Hospital and Medical Center into a World-Class Teaching Facility

Background

Englewood Hospital and Medical Center (EHMC), located in Bergen County, New Jersey provides patients with the highest level of compassionate care through a broad range of state-of-the-art clinical programs, and the most advanced treatments and diagnostic services. It is renowned for its bloodless medicine and surgery program, cardiac and vascular programs and its leadership in breast care, oncology and joint replacement services.

Through its affiliation with the Mount Sinai School of Medicine and the Mount Sinai Consortium for Graduate Medical Education, this thriving, acute-care and community teaching

hospital trains medical residents in a variety of disciplines, including internal medicine, critical care medicine, surgery, pediatrics, podiatry, and pathology. Englewood Hospital is home to a Vascular Fellowship Program that has trained a generation of world-class vascular surgeons.

The Challenge

The 233 seat hospital auditorium is truly a multi-purpose room – used regularly as a teaching facility for the nursing school and for seminars and special events featuring live music or theater productions. Aside from minor improvements to the AV equipment, the auditorium hasn't seen considerable upgrades in 27 years. The AV system was not user-friendly and never worked well. The hospital regularly hired outside companies to bring in sound equipment for special events.

"The space needed to represent the world class hospital EHMC is," said William Schafer, Principal, Assurity Design Group.



“The full integration of Crestron product, from hardware to wire and lighting, made the installation seamless.”

William Schafer, Principal, Assurity Design Group

The Solution

EHMC retained New York-based, Assurity Design Group, LLC to develop, design and manage the implementation of completely integrated AV technology systems, sound system and lighting control.

The objective, as identified by EHMC Vice President, Thomas Greco, during detailed discussions with Assurity Design Group, was to create an AV system simple enough for instructors,

nursing staff, local doctors and visiting physicians to operate with any device input.

“There was only one choice - Crestron DigitalMedia™ and Crestron lighting,” proclaimed Schafer.

The auditorium was stripped down and almost entirely rebuilt. New walls, seats and state-of-the-art technology – including all lighting, sound system and AV presentation systems were installed.



Crestron DigitalMedia was installed as the single-platform solution to manage, control and distribute multimedia technology throughout the hospital. DigitalMedia is the only single-wire solution that seamlessly handles true high definition signal routing, switching and long distance distribution of all analog and uncompressed HD digital signals, and manages embedded data such as HDCP, EDID and CEC. CresFiber supplied the long distance AV distribution, transmitting all signals up to 1000 feet.

The previous lighting fixtures and lighting control system were removed and replaced with Crestron GreenLight® lighting control solution to reduce energy and operational costs. Incandescent lamps were replaced with lower watt dimmable compact fluorescent lamps, and theatrical lights were replaced with moving head lights and LED wash lights. All lights were rezoned (16 zones), with customizable presets for frequent users. Full show control is possible using the V15 touch screen in the control room or direct fixture control.

The Assurity Group designed new seating and acoustics to improve the appearance, sound quality and performance value.

“ Without a fully integrated Crestron system, the install would cost more money and have little flexibility.”

William Schaffer, Principal, Assurity Design Group

Systems at a Glance

Crestron TPMC-V15 delivers a powerful touch screen control solution featuring a 15" widescreen WXGA touch display with 24 bit color graphics and video, advanced device control apps and objects, streaming multimedia, web browsing and IP intercom.

The V15 touch screen offers custom control screens tailored to the needs of EHC users, simultaneously expanding and simplifying control over a broad range of complex devices and systems.



The Assurity Group equipped the on stage lectern with every possible video source available to fit the presenter's needs. Crestron DVPHD, the world's only multi-window digital video processor, with native touch screen control and annotation, supports HD video and computer signals from multiple sources, was the solution. Through a choice of input signals, DVPHD could handle DVI, HDMI™, Display Port (Multimode), HD-SDI and analog signals. Users can simply plug into the desired delivery wire type and the system works.

DVPHD provides EHMC with a fully-customizable HD graphical environment, and enables real-time annotation and touch screen control for lectures and seminars, connecting to a projector, computer, document camera, HD camera or ultra sound equipment for live demonstrations.

The solution was customized to prevent unauthorized use of the system. There is no "On" or "Power" button anywhere on the lectern. Approved operators use magnetic cards to activate the system. Swiping the card allows users to turn on the system and log in to a data base for tracking purposes.

EHMC is the first hospital in the United States to have thermal imaging counters in use. The counters know the exact amount of people in the room at all times and can be used to notify the instructor of the attendance. EHMC can run a detailed cost per person energy bench mark when renting the space for events.

The solution can monitor the activity of source devices. Whether someone walks away with a mic or the mic battery is low, the system can detect these issues and alert administrators.

Benefits and Results

Crestron provides EHMC with an unparalleled presentation solution and reduces annual energy consumption by 80%, qualifying the space for LEED certification.

The Crestron solution provides EMHC with the ability to record or stream live sessions from the auditorium with the use of a Sonic Foundry system.

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