EcoManor
Atlanta, GA

The official ribbon cutting ceremony on February 2, 2007 marked the opening of the first LEED certified residence in the Southeast and one of the largest in the United States, "EcoManor." The goal of the project is to promote "green" building and to provide a much-needed tool to educate homebuilders, homeowners, vendors, and local governments about building environmentally sound, healthy, and resource-efficient places to live.

Laura and Rutherford Seydel built the EcoManor residence in Atlanta, Georgia, where it will be used as a tool to illustrate the benefits of earth-friendly, energy-efficient homes. More importantly, EcoManor will serve as an educational tool to builders, architects, designers, vendors, landscapers, educators and homeowners in an effort to promote green living, conservation options and improved residential building practices. The house utilizes geothermal energy, which is gathered by the largest residential solar panel in Georgia to date, and features rainwater collection and gray water reuse.

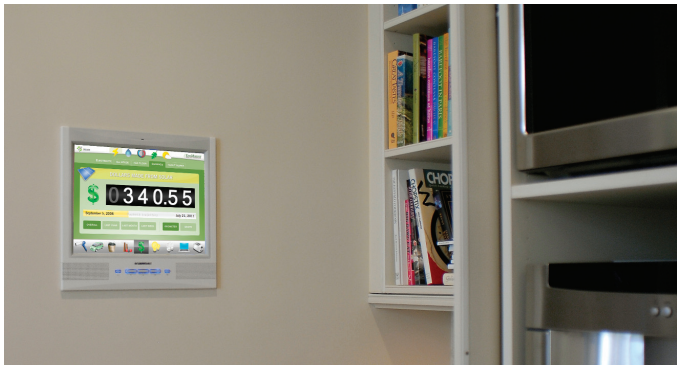
"The touchpanel monitors electricity, water, and geothermal energy, showing the running totals and energy/ water flows for the house"

The focal point of the project is the **Crestron TPMC-15**. The touchpanel monitors electricity, water, and geothermal energy, and supports Flash 9 animation graphics showing the running totals and energy/water flows for the house. The Seydel's wanted a way to portray the systems in the house as a means of saving money and the environment. Laura and Rutherford believe that "if you see your usage, it will make you change your behavior". The Crestron touchpanel is the means by which this cause and effect is demonstrated and is intended to serve as catalyst for positive change.

"It'll be incredible to see our utility usage on a real-time basis," Rutherford Seydel said. "There's no telling how much energy and money we could save each year if our homes could tell us that."

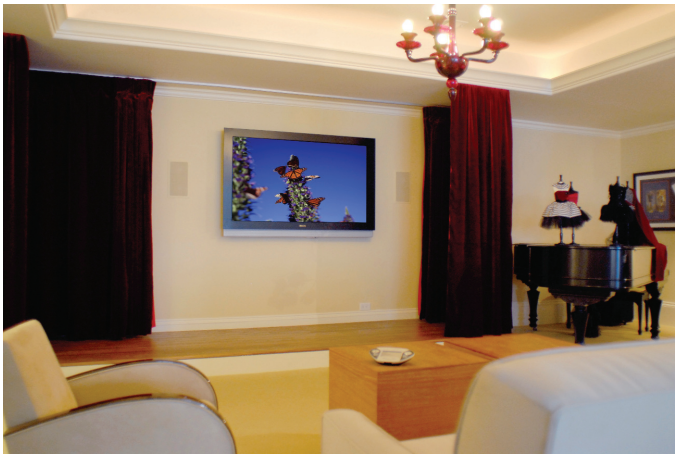
The architect, William Harrison, Harrison Design Associates, designed the home and specified Crestron for the control and automation solution. "EcoManor is not our first experience with Crestron. We use it all over the country in all of our offices and houses. Ninety percent of our projects use Crestron," stated Harrison. "Of all the systems and technology platforms out there for whole house coordinated control, Crestron is by far the best, and the only system we recommend. We tell our clients, 'If you're going to tie it all together, we found Crestron is only one that consistently works and gets the job done.'"

Interior Media of Atlanta, Georgia was brought in early in the process to design and install the AV and control systems. Synpros, Crestron Authorized Independent Programmers, programmed the system in partnership with environmental systems experts Lucid Design Group. Lucid's unique Building Dashboard™ product offers an interface solution capable of integrating with renewable solar, water and HVAC technologies, building automation systems, public utility meters and data logging devices. Synpros and Lucid worked together to integrate Building Dashboard with Crestron, and to create an intuitive touchpanel GUI design for whole house automation and real-time communication with all the energy/resource systems.



"Crestron touchpanels provide an ideal site for integration with Lucid's Building Dashboard™ system," states Gavin Platt, Creative Director, Lucid Design Group. "Crestron and Lucid's products combined offer the most complete 'green' monitoring, automation and control solution available."

The GUI screens vary from simple, clear payback odometer gauges to more detailed graphs. The designs include a main menu on top and unit selectors at the bottom. Touchpanel communicates in real-time with the home's central environmental systems database for current energy and cost savings information display.



The icons along the bottom of each screen allow the user to change the currency used to express consumption or production values. For example, the first screen may show PV system electricity production payback in terms of dollars, carbon dioxide averted from the atmosphere, or equivalent number of compact fluorescent light bulbs -- units that are more meaningful and intuitive than basic "kilowatts". There is also a live weather forecast feature, which communicates via IP with external weather services.

"We are thrilled to be a part of this landmark project," said David Hardy, CEO of Interior Media. "This is a great opportunity for Interior Media to demonstrate how our state-of-the-art integrated systems can perform in an environment where energy-efficiency is the primary concern."

Crestron provides easy control of audio/video distribution, whole-house lightingand temperature control. Automating lighting and thermostats can significantly reduce energy consumption and lower costs by using dimmers, pre-set scenes, occupancy sensors and timers. In addition to the main touchpanel providing remote access to all systems, several **Crestron keypads and thermostats** are also installed throughout the home for convenient local control.

The EcoManor **TPMC-15** displays the owners' energy usage in real-time and lets them make changes individually or set the house to function automatically. The house can be set to Economy Mode, Miser Mode, or even Entertainment Mode. Seydel said, "Interior Media really understands our goal and vision for EcoManor and they are creating an integrated system that's highly effective and very user-friendly."

Interior Media also added some fun to go along with all the function. They installed the **Crestron CEN-IDOC** (iPod® interface), which delivers the owners' iPod® experience throughout the house, two Philips Plasma TV's and a Philips LCD TV. Audio comes through Niles High Definition Speakers installed throughout the home.

Dealer/Installer: David Hardy Interior Media
Programmer: Chris Jaffe Synpros
GavinPlatt Lucid Design Group

go green with CRESTRON®

Crestron is dedicated to the "green" initiative, providing the most energy efficient and environmentally safe systems on the planet.

As the global leader in advanced control and automation technology for commercial and residential solutions, Crestron develops products and automation solutions that are RoHS compliant and meet ASHRAE and LEED standards.

The American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) is an international membership organization standards to provide minimum requirements for the energy-efficient design of buildings.

These standards set minimum requirements for the design and construction of new buildings, new portions of buildings, and new systems and equipment in existing buildings. ASHRAE standards apply to several systems and equipment used in conjunction with buildings including HVAC and lighting.

iLux is compliant with Standard 90.1-2004 – Energy Standard for Buildings, and specifically the Mandatory Provisions 9.4.1.1 (b) and (c) regarding the use of an occupant sensor that turns the lights within 30 minutes after leaving the space, and a control system that indicates that an area is unoccupied. iLux also complies with Provision 9.4.1.4, which pertains to the control of display, accent, task and demonstration lighting.

Crestron lighting systems may contribute to LEED certification depending upon system design and implementation.

The U.S. Green Building Council (USGBC) is the nation's foremost coalition of leaders from every sector of the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to work. More than 6,000 member organizations work together to develop a variety of programs and services, including the LEED (Leadership in Energy and Environmental Design) Green Building Rating System®, which applies to new commercial construction, existing building operations and commercial interior projects.

Within the LEED rating systems, building products contribute to achieving LEED points following performance-based requirements. To meet these requirements, practitioners identify products that have specific attributes. iLux is compliant based on the integral motion sensor that provides substantial energy savings. In addition, by using an inexpensive third-party light sensor, iLux enables daylight harvesting with both lighting and drape control.

At Crestron, we believe that we have a responsibility to our community to be good corporate citizens, and to provide the best products and solutions for our dealers.

Crestron Electronics, Inc. 15 Volvo Drive | Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 | Fax: 201.767.1905
www.crestron.com