Reaping the Daylight Harvest

WINDOW SHADES CONTROL INTEGRATION OFFERS ECO-FRIENDLY AND PROFITABLE ANSWER TO SHRINKING MARGINS IN THE CI CHANNEL

BY KAREN SUSSMAN

Unfortunately for the custom installation channel, the types of technologies installed in mega-mansions around the world are of the power-sucking variety that are frequently at odds with the “green” or “eco-friendly” alternatives put forth as tangible ways out of the global environmental and financial crisis.

One application of technology, however, already has proven to be a profitable green-friendly alternative in commercial buildings and is now making its way into the home. The concept of daylight harvesting combines natural light and window shades with artificial light and lighting control to achieve specific room brightness goals. As natural light is “harvested” and measured by an ambient light sensor, a lighting control and shade system automatically dims the light fixtures and/or adjusts the shades so that the natural and artificial light work together to provide the desired light level in a given room.

With the Department of Energy reporting that homeowners spend, on average, five to 10 percent of their electric bills on lighting (and in some regions that rely heavily on air conditioning it’s as high as 25 percent) residential electronic systems contractors who aren’t already steadily doing shade control have a huge opportunity. Offering shades control technology to customers helps them to save on electricity costs while also making them feel good about being a friend to the environment. And, unlike “commodities” such as flat-panel displays, custom shades control products still offer profit potential for dealers.

DELIVERING THE GOODS

There are many nuances involved with integrating shades control, and it’s not the easiest technology to learn. Nonetheless, manufacturers are introducing new product features, offering more training classes, and providing strong support teams to get integrators more comfortable with selling and installing these products.

Draper Inc., a manufacturer better known for its motorized projection screens and projector lifts, has seen the commercial trend of shade control begin trickling down to the residential market.
“Commercial customers looking to save money, but wanting to keep daylight and views, have driven the shade market for some time,” said Clint Childress, green buildings coordinator for Draper. “New motors and controls, which allow easy integration with other building automation, have further helped shades grow. Both of these trends are also important in the residential market.”

“Being eco-friendly and conserving energy have catalyzed automated window coverings into the ranks of distributed audio and security,” agreed Thomas Harkness, technical service coordinator for Somfy, a Cranberry, New Jersey-based manufacturer of motors and electronic controls for interior and exterior window covering applications. Harkness explained that motorized window coverings help control energy in both cool and warm environments.

“They retain cool air in your home and they provide the same benefit in cooler climates by reducing heat loss and helping to maintain a comfortable interior temperature, no matter where you live,” he said.

In other words, savvy homeowners can program shades to lower or rise at certain times of the day to help manage the heat gain in the summer and heat loss during the winter, reducing energy consumption and costs.

Somfy recently enhanced its product line with an IP interface, a serial device with a built-in Web-based server used to connect a variety of Somfy motors and control devices to an IP network. The company also has introduced a new 16-channel Universal Radio Technology Somfy (RTS) interface that has an auto-detect port for utilizing serial commands (RS-232 or RS-485), a RS-485 port, and an IR port for working in conjunction with universal remote control companies.

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Manufacturers are well aware of this challenge and are all looking to make shades control easier on their dealers and integrators. "Shade installations are like fingerprints; no two are the same," said Draper's Childress. His company is offering its dealers education and online documentation to help make their jobs easier.

Schneider Electric provides training based on exercises using different scenarios to guide the installer to the right product. The French company offers a comprehensive range of products and services for the residential, buildings, industry, and energy and infrastructure markets. "We manufacture several types of light level sensors in different shapes and sizes with a variety of ranges," said Dan Loncar, area sales manager for Schneider Electric. "How is an installer to remember which is the correct one to use in their specific installation?"

Through its partnerships with Somfy and Hunter Douglas, Crestron is helping its dealers stay ahead of the curve. "The hardest part about shades is installing the actual shade," Singer said. Crestron offers free training courses in 40 locations worldwide, including 12 in the U.S. Singer said Crestron is committed to investing in more training, opening additional regional offices, hiring more full-time certified trainers, providing more courses and developing online training.

According to Harkness, Somfy’s greatest challenge is training integrators on fabrics (even though Somfy doesn’t manufacture fabrics) and the variety of motors and controls for any type of application. Through Somfy’s System Integration Course, usually held at a fabricator’s facility, Somfy integrators, and those who want to add Somfy to their line, learn about motors and controls from Somfy and styles of window treatments and fabrics from the fabricator. Somfy has also partnered with CEDIA to hold CEU-accredited classes on the subject.

Lutron is working closely with its dealers to ensure that everyone on its team is well-versed on lighting and shade control from a sales, design, installation, programming, and service perspective. "We’re working with our dealers to communicate the evolving and growing business case for total lighting and shade control systems as a path to continued growth and revenue in the residential market," Weinstein said.

The company’s training programs, experience centers, and annual market development programs are designed to help Lutron and its partners achieve success. "We must all focus on relationship building, joint planning, and a commitment to execute mutually agreeable growth plans, in spite of the challenges the economy is throwing at us," Weinstein said. "Lighting and shade control is still a vastly under-penetrated market."

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