Project Overview

Franklin & Marshall College
Lancaster, Pennsylvania

University Lighting Retrofit

Wireless lighting controls simplified a lighting retrofit in the campus' iconic "Old Main"

Franklin & Marshall College is rich in tradition and committed to the learning experience.

Franklin & Marshall's campus is peppered with a mix of historic and modern buildings. For the facilities team, those beautiful, historic brick buildings can add a layer of challenge when it comes to facility updates and maintenance.

This is just one of the reasons college electrician Pat Henry, is so pleased with Lutron's new Vive wireless lighting control solutions, and why the college is working to include Vive as part of the master specification for campus improvements.

LUTRON

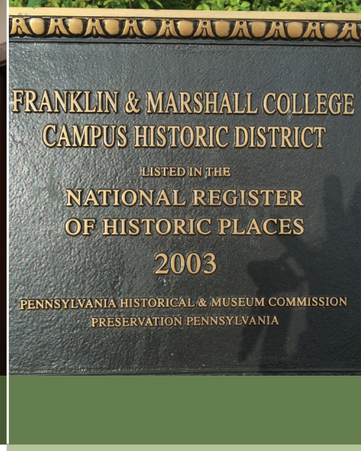
"On a campus where some of the buildings date back to 1792, it's just not always feasible to have to fish wires through the walls."

Pat Henry, Franklin & Marshall College Electrician

Pico controls on podium

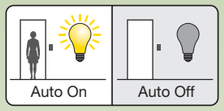
With Vive, the system installs easily and Pico controls can be placed on classroom podiums

"We can use the right mix of products in every space – classrooms, hallways and offices," says Pat Henry.

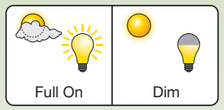


Energy-saving strategies

As a result of the retrofit, the college is seeing electricity savings of 55%.

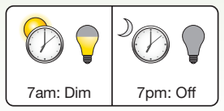


Wireless occupancy sensing



Daylight harvesting

Personal dimming control



Scheduling

Challenge

Lighting and lighting control has come a long way in the last 5 years, with LED technology largely replacing traditional fluorescent lighting fixtures. Renovations in any office, classroom, or dorm almost always include a complete lighting and control upgrade.

The Franklin & Marshall facilities team came to Lutron for a solution that was easy to install with minimal disruption to space occupants, easy to program, energy-efficient. The system they chose had to have timeclock functionality, the ability to load shed, and provide real-time energy savings, all within the college's budget.

Solution

Vive is a new solution from Lutron addressing the need for scalable control that is wireless, easy to install, and simple to program. The college agreed to try it out in an energy retrofit in the College Square administrative offices. Pat Henry was able to install and program the controls while the building was occupied and without outside help.

"We were able to complete the installation and setup in a total of 4 days, working from just 6-8 am. As one of the first Vive projects, Lutron even asked us for feedback on the Vive app, helping us make programming even more intuitive," said Henry.

Occupancy sensors ensure that lights are not left on when the space is vacant, daylight sensors automatically reduce lighting levels in perimeter offices, and Pico controls provide personal dimming control to space occupants. With the existing fluorescent fixtures, the administrative offices were using 130kWh during the measured time period. After the lighting and controls retrofit the space is using 60.86kWh in a comparable time period – a total electricity savings of 55%, which allows the college to redirect those dollars to benefit its students.

Results

After the success of the College Square installation, and previous experience with stand-alone Lutron wireless controls in Old Main (a building that houses administrative offices, lecture halls, and recital rooms), the Franklin & Marshall facilities team approved the Vive solution for use in a whole-scale renovation of its Keiper Liberal Arts Building.

What else made the Vive wireless solution stand out? "It just works." said Pat Henry, "The system is versatile and offers tremendous functionality." First, he explains, it's wireless, and that's an immediate win, "On a campus where some of the buildings date back to 1792, it's just not always feasible to fish wires through the walls. With Lutron Pico wireless remotes, you can put the control wherever you need it, and that's a huge time and materials saver." Notably, Keiper was dedicated in the 1930s; Old Main dates back to 1856, and is listed on the National Register of Historic Places.

Henry pointed out that in the Keiper renovation, he was able to put wireless controls at every podium in every classroom, giving professors convenient control of the lights wherever they are. "We can use the right mix of products in every space from open offices, to classrooms, to meeting rooms – it makes product bids, installation, and programming easier and less time consuming."

Vive is also completely scalable. A space can be programmed as a stand-alone system, and tied into a centralised Vive hub down the road, making it easy to adjust any area of lights from a smart phone or tablet.

Franklin & Marshall College prides itself on a 229-year tradition of unleashing the full potential in its students. Lutron is honoured to be part of this tradition, and to deliver the full potential of lighting energy savings, personalised control and centralised lighting management throughout the campus.

Visit lutron.com/vive-europe for more information.

Lutron Vive wireless solution reduces labour and material costs and offers simple to use software.

The lighting control solution includes:

- wireless dimming modules
- wireless occupancy sensors
- wireless daylight sensors
- Pico RF wireless remote controls

Building photos courtesy of Franklin & Marshall College

The Vive solution is also used in a whole-scale renovation of Kieper Hall.

Note: This case study does not constitute an expressed or implied endorsement of Lutron products by Franklin & Marshall College.

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