

AHEAD OF THE CURVE

It's how we think, and where we keep our clients

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Digital Controls Flip the Switch to the Future

When you hear “lighting controls” do you envision a light switch? We all have light switches in our homes. It’s a simple concept with which we’re all familiar. In the world of commercial lighting controls however, things are not so simple, according to Ring & DuChateau Senior Lighting Designer Holly Blomquist.

“At one time in the not-too-distant past, commercial lighting and controls were much simpler than they are today,” Blomquist said. “We used incandescent, fluorescent, and HID lighting, and simply turned them on and off as needed.”

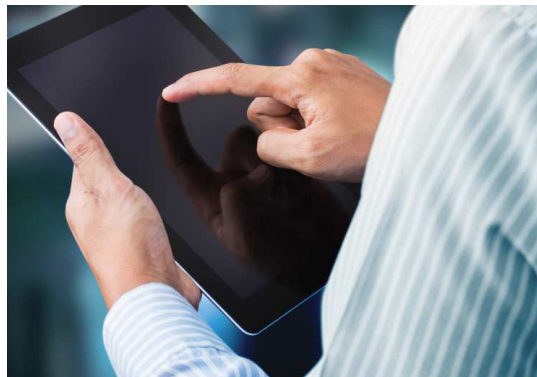
With the advent of commercial energy codes, things changed. Codes establish a threshold for how much wattage is allowed to be dedicated to lighting. Codes require lights (and sometimes receptacles) to automatically turn off if nobody is in the room. Codes require that in the presence of ample daylight, lighting responds and dims automatically. Sustainability ratings systems like LEED® apply another layer of energy-saving complexity. The single light switch as the only lighting control in a room has become a thing of the past.

Then LEDs came along and turned the lighting industry upside down. Many are aware that LEDs use less energy, but the most significant change they bring is making lighting a digital technology. As energy codes have become more stringent and require more of lighting controls to reduce energy use, digital lighting control systems have come to market.

According to Blomquist, the advantages of digital control systems are the instant compatibility with LED, plug-and-play devices, and scalability and networkability of the systems. One room or a whole building can be controlled from a smart tablet, and a single system with minimal diversity of devices can meet all energy code requirements. The drawbacks are cost and user comfort level with the controls. At this time the up-front cost of digital controls is somewhat higher than analog, but the real hurdle is that many people are more comfortable with simple controls, whether installing, maintaining, or as an end user.

“We observe that as more digital systems are installed and people are properly trained on how to implement them, and as analog devices require more complex configurations to meet the needs of ever-demanding energy codes, it becomes clear that digital controls are the future,” Blomquist explained.

Facilities in Wisconsin haven’t had to contend with the strictest of energy codes - yet. For now, there is still a place for analog controls. However as Wisconsin moves forward contractors, facility managers and end users will hear engineers recommending the implementation of robust digital lighting and control technologies that optimize lighting capabilities to keep buildings operating smoothly into the future.



“Controlling LED lights with analog controls is like playing an MP3 on a record player.”

— R&D Senior Lighting Designer
Holly Blomquist





The Ringdu Lighting Design team includes, from left, Lighting Designer Colleen Kroll, Senior Lighting Designer Marge Cooper, Lighting Designer Amanda Busalacchi and Senior Lighting Designer Holly Blomquist.

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We Speak the Language of Light

Lighting determines the atmosphere and functionality of any space. Too much light could increase stress, not enough could mean an inaccurate diagnosis. Making determinations about how a space should be lit is a matter of aesthetics. Making the aesthetics happen is a matter of technology. Bridging the gap between the two requires speaking both languages, aesthetic and technical. At Ring & DuChateau, we call that the language of light. And we have a lighting design team that's fluent.



Did You Know?

Ring & DuChateau's Lighting Design Team is one of the largest in Southeastern Wisconsin. **Now you (Ring &) Du.**



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