

# TD | TECHNOLOGY DESIGNER

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Electrolux

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Lighting Control

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## AUTOMATE THE EXPERIENCE

BY STEVE PANOSIAN

ABOUT 10 YEARS AGO AND LONG BEFORE WRITING FOR *TECHNOLOGY DESIGNER MAGAZINE*, my wife and I collaborated with a designer-builder on plans and options to convert our kitchen, dining room and living room into one great room. I will never forget enjoying that first week after it was finished. We loved the room layout and having ample countertop space for serving food and drink when entertaining. The TV was situated for a relaxing view from any seat, and we enjoyed the more intimate atmosphere when watching a movie or just listening to music at night. The only missing element was automation, so setting the room's lighting

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involved a clockwise or counterclockwise walk around its perimeter and the manual adjustment of a half dozen wall switches for dimming or turning on/off lights. While we did not mind the routine walk around the room, looking back it would be rather convenient today had we added control over the room's lighting with a few keypads and three or four custom 'mood' settings.

It has been pointed out by lighting designers that when entering a home for the first time, the first impression has more to do with the lighting of the space than any other décor feature. Intelligently designed lighting can make a home feel modern, spacious, clean and welcoming. With new headways in lighting technology, what was once a periodic installment is now a wholly unique design feature to consider for the home. Not only does investing in a lighting design incorporating today's LED fixtures lower the electricity bill, but it can also entirely transform the ambiance and quality of the space.

## *automated lighting design*

In speaking with technology designers, their clients generally express a level of interest in smart home automation beyond the desire to control the home's audio and video entertainment systems, and this is when lighting enters the discussion. There is not always one approach in defining and determining a home's lighting requirements and therefore why and when a lighting designer comes into the picture.

Smart Home Lighting Control requires the expertise of a designer's vision, understanding the client's preferences, factoring the architectural considerations, and of course, the technology designer who must manage the crucial step of automation planning. These early discussions define the scope of automation needs that involves working with the lighting and window treatments manufacturers, an automation company, and the electrical contractor.

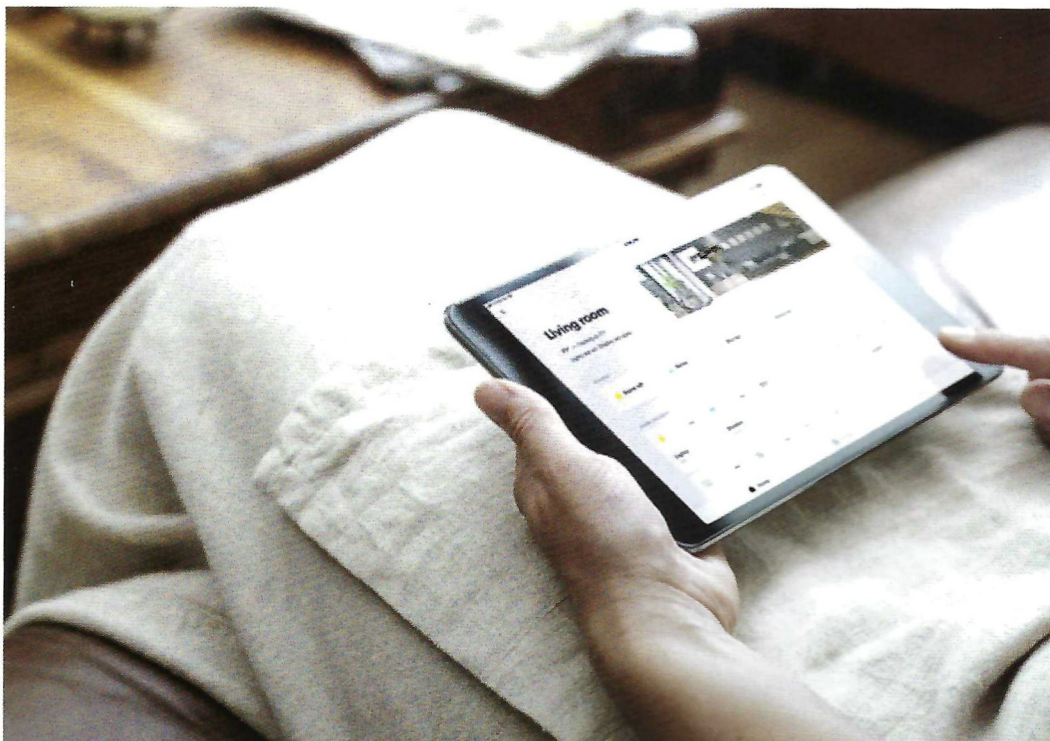


IMAGE COURTESY OF CRESTRON.

Each homeowner's preferences differ in what piques their interest. The technology designer must introduce the merits of the lighting amenities and controlling light also means controlling motorized shades in the most popular rooms beginning with the kitchen and master bedroom. Whole home lighting control, including outdoor lighting, must also be considered in the early plans and the pre-wiring step that should also factor in any future needs.

## *lighting designer*

Technology designers have built relationships over the years with lighting and shade companies like Lutron and the same with home automation control companies like Savant and Crestron. These relationships, their combined experiences, can create a lighting design plan in collaboration with the client's architectural design team and/or interior design team. Regardless, the lighting designer's role is to provide the lighting plan for the entire home, the technology designer's role formalizes an installation proposal based on their discussions with the client, the lighting designer, and the respective vendors. The electrical contractor then draws the load schedule for the home's lighting and control installation that identifies the circuits required, the various devices,

the switches and dimmers, and down to the keypads that are needed for each of the rooms planned for automation. Therefore the prewiring phase must be coordinated with the electrician's electrical wiring of the home.

## *lighting control programming*

This is another critical expertise where the technology designer's experience comes into play. The technology designer is responsible for the system control installation and its control programming. For instance, if the plan calls for the master bathroom control of the shower light, the vanity light, the high hats, the fan, the commode, whatever it might be, and if there are shades planned for the room, the lighting control must be programmed accordingly. Setting a time-of-day lighting level and color lighting hues, the lighting programmer sets how the dimmers and keypads will control each room's light settings. There are always fine adjustments made after the initial programming that involves a 'walk-through' tutorial with the client, and weeks after an installation is completed any further refinements can be performed remotely.

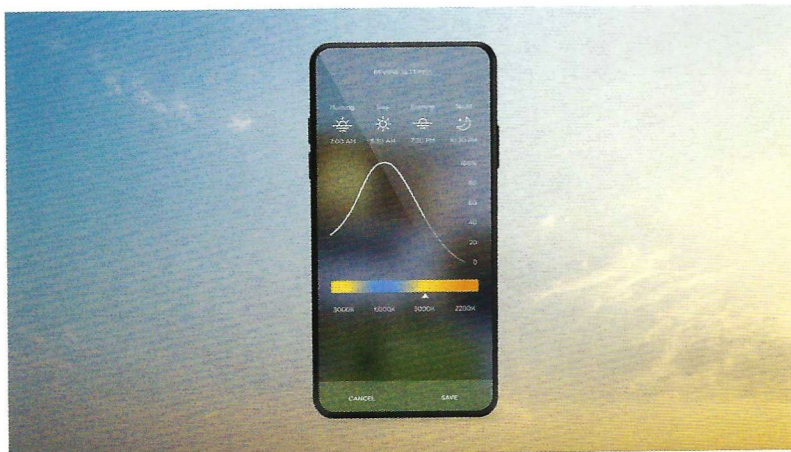


IMAGE COURTESY OF SAVANT.

Savant's Daylight Mode allows homeowners to personalize their circadian rhythms based on the home's geo-coordinates.

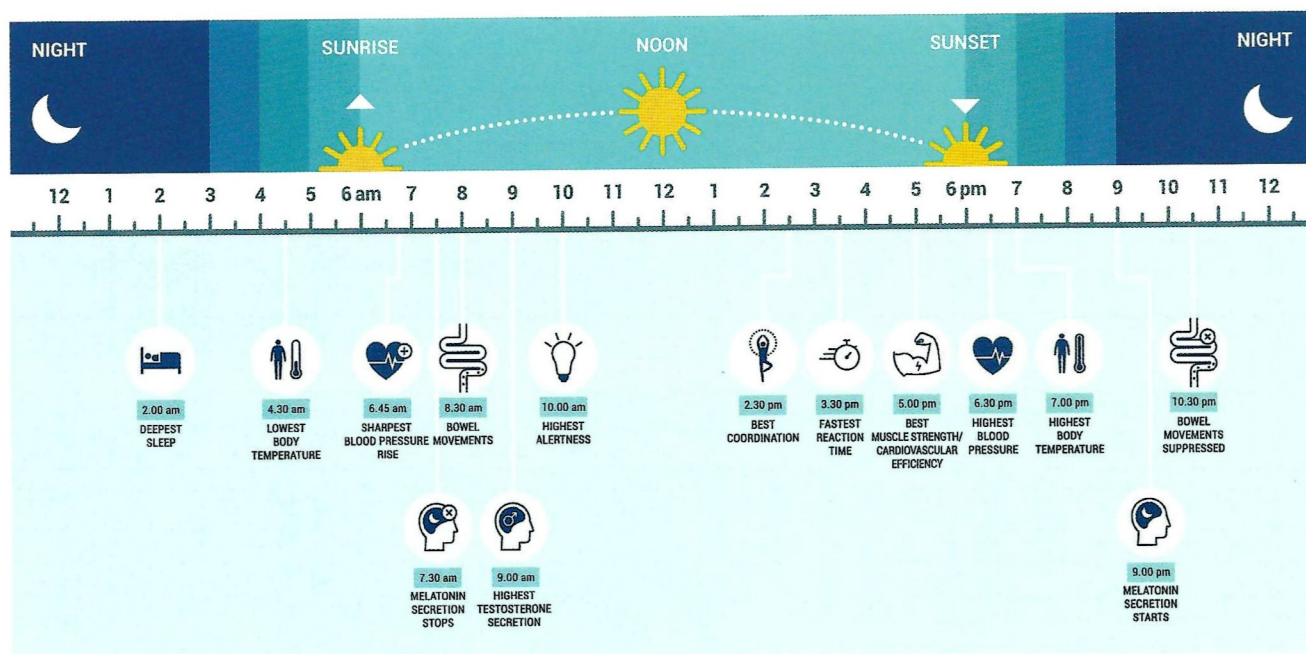
## advanced automation

The technology designer has on staff a lighting programmer who possesses the artistic experience for creating a room's starting point light settings, a 'canvas' so to speak, that can be later fine adjusted to meet the client's preferences. How a home or room's lighting is controlled is not limited to one control. Most every control company offers custom touch panels, but they also support control using a mobile applet and AI voice control.

While lighting can be programmed for any time of the day, including fade control settings, there are more sophisticated lighting control solutions that can be programmed to automatically control lighting to align with human circadian rhythms that change throughout the various times of the year. Savant, as an example, their lighting is designed to improve wellness, too. A Daylight Mode allows homeowners to personalize their circadian rhythms based on the home's geo-coordinates. It also connects circadian lighting to individual internal biorhythms that promotes well-being, reinforces health, and

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## CIRCADIAN RHYTHM AND HUMAN BODY



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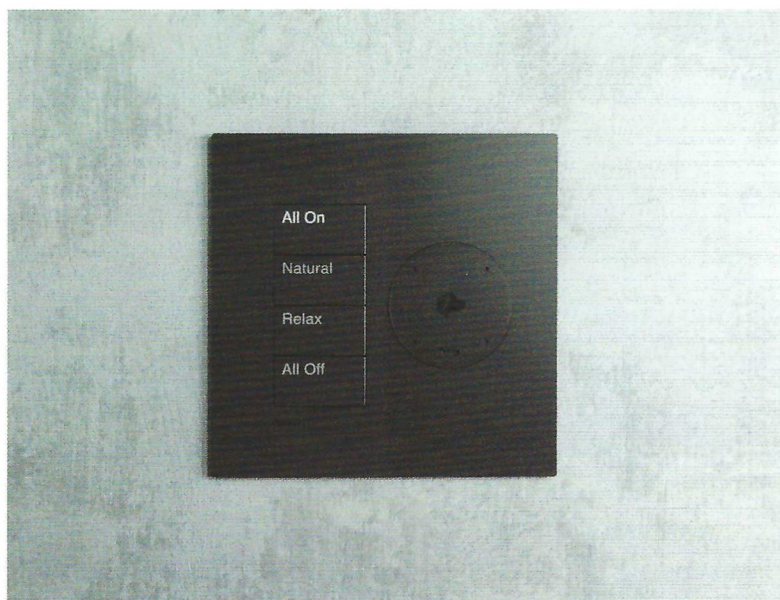


IMAGE COURTESY OF LUTRON.

even nourishes the imagination. The Daylight Mode employs advanced logic that adjusts intensity and color temperature for a healthier sleep and wake cycle. Crestron also supports circadian rhythm lighting and dawn-dusk simulation that improves sleep energy and mood, the system sensors adjust the lighting to achieve just the right brightness.

### *hands-free voice control*

The synergy of Josh.ai's power combined with Crestron lights, shades, thermostats, audio, video and scenes uniquely provides the ultimate in smart home customization. These two companies, incorporating Crestron SIMPL and Home-OS support offers the convenience of Josh.ai's contextually aware voice automation. Once Josh Micro is deployed, the Crestron system's configuration is automatically detected via the Josh.ai SIMPL module or the home authorization token. Within seconds, the freedom of adjusting the state of rooms and devices with natural voice commands can be achieved from anywhere.

### *vacation mode*

Addressing home security, when people are away there are special settings that create the appearance that someone is always home. The design objective is in creating the Vaca-

tion or Away Mode that is easily activated. A vacation mode can be created so a couple of lights might go on during the day, the kitchen, maybe the family room, too. It can also be controlled astronomically, so as soon as sunset hits, daily programming can turn the master bedroom lights on a Monday, another room's lights on Tuesday, Wednesday, or any other day, all the bedroom lights on, or any mix of settings for any day of the week.

### *outdoor lighting*

Outdoor lighting is generally decided on after landscaping is completed and depends on the home's outdoor amenities. Lighting pools, decks, yards and outdoor kitchens are becoming more popular and designing the right lighting sets the mode for enjoying nighttime entertainment.

Lighting for the front of the home, back of the home, or a patio entrance has become quite common. Anything is possible by adding elements of accent lighting, security lighting and safety walkway lighting.

My driveway floodlight is on a motion sensor, so at least I have that somewhat automated. Now it's time to go back to square one and automate the interior with a few keypads and a few scenes to finish what we set out to enjoy some years ago.

