Embracing Energy Management

How San Diego-based Lightworks is Supporting Savant's Vision for Smart Home Power

By Jeremy Glowacki

Since its founding in 2005, Savant has been primarily known as a home automation and control company specializing in smart home technology and integration that works seamlessly with Apple's ecosystem. In recent years, however, the company has expanded its reach into the development of what it calls the "Ultimate Energy Management Solution."

The Savant Power System monitors energy production and usage trends, controls circuits at the distribution panel, and manages solar, battery, or generator backup sources all via the Savant App. Savant systems scale to meet the needs of any size building from single-family homes to large installations. Savant Power Systems enable homeowners to offset peak utility rates, keep stored power flowing to where it's needed during grid outages, and optimize overall energy usage.

Troy Dunnington, CEO of San Diego-based full-service design-build integration firm, Lightworks, is an example of a Savant dealer who fully embraces the brand's entire power package. He's so committed to Savant Power, in fact, that he has redesigned a room in his showroom to display the brand's latest offerings in burgeoning CI category.

As a ProSource member HTA Certified dealer, Savant Ambassador Elite dealer, Lutron Black Diamond Dealer, and Hall Famer dealer, Lightworks is a highly respected and decorated member of the custom integration industry, which provides an added level of credibility to Dunnington's enthusiasm for the burgeoning smart power category.

Lightworks is enthusiastic about enabling their clients' visibility of energy production and consumption trends, helping manage weather





Lightworks, a custom integration firm owned by Troy Dunnington in San Diego, added 900 square feet to their showroom specifically focused on Savant Power solutions.

power outages, onset peak utility rates when on the grid, and optimizing energy usage when off the grid.

The systems that Dunnington's team has been installing provide Lightworks' southern California clientele with access to clean dependable power when they need it, he says. Through the Savant app, they have personalized control over every circuit in their home, and they can monitor their energy production and storage at a glance and receive personalized notifications.

As Dunnington explains it on his website, Savant Power products, installed by Lightworks, offer a reliable and efficient solution for implementing energy load shifting, battery storage, and island mode, presenting "a compelling solution for maximizing the benefits of solar power and transitioning toward a sustainable energy future. By utilizing excess solar energy, storing it in batteries, and intelligently managing energy consumption, users can achieve energy independence, reduce costs, and enhance the grid."

Energy Load Shifting

Energy load shifting refers to the process of adjusting the timing of energy consumption to optimize the use of renewable energy sources. With solar power, energy load shifting involves utilizing the excess solar energy generated during the day for later use when solar production is reduced or not available. This concept allows for more efficient energy management and reduces reliance on non-renewable energy sources during peak demand

periods. Lightworks uses smart breakers to determine when and under what conditions appliances, devices, and outlets turn on or off.

Battery Storage

Battery storage plays a crucial role in energy load shifting by storing excess solar energy for later use. When solar panels produce more energy than is needed, the surplus is stored in batteries instead of being fed back into the grid. During times when solar energy production is low, such as during the night or on cloudy days, the stored energy can be drawn from the batteries to power homes or businesses.

Battery storage systems enable users to reduce their dependence on the electrical grid, providing a degree of energy self-sufficiency. Battery storage also helps reduce reliance on peak energy rates by utilizing stored energy during high-demand periods, leading to potential cost savings on electricity bills.

Understanding Island Mode

Island mode, also known as islanding or microgrid mode, refers to the ability of a solar power system, with battery storage, to operate independently from the electrical grid during a power outage. In this mode, the solar panels continue to generate electricity, which is stored in the batteries and used to power critical loads within the premises. This functionality enhances resilience and provides an uninterrupted power supply even when the grid goes down.

Critical Load Management (Load Shedding)

Critical load management can be set up to

keep critical services active and this can be dynamic depending on your battery storage levels, and your solar generation capacity. So, things like fridges or freezers, heating or cooling devices, lights, certain power outlets (phone chargers), or life support functions can be kept active for as long as possible and turned off one by one depending on battery storage levels and usage.

Dunnington added 900 square feet to his showroom specifically focused on Savant Power with closet and cabinet displays enhanced by niche, art, closet, and shoe lighting — "all of the things that our clients will spend a good amount of money on," he said.

Lightworks built an impressive Savant Power display and worked with the manufacturer on supplying artwork and display items to dial in the demo space. Lightworks will use the space for builder and designer lunch and learns, always making sure to include field teams in the process, not just principles.

Dunnington said he believes that power is the "final leg of the stool" when it comes to whole-home technology control. Inconsistent power had been the last area negatively affecting the consistent performance of well-designed and installed smart homes.

"In this industry, with all the programming and software, [power was increasingly] the failure point," he said. "If you think about it, it's the final piece of a smart home. It's the last segment for us to really make a home smart, and we're really excited about it."