



An Illuminating Conversation About the Future of Entertainment Lighting & Power Control

IMPORTANT THINGS TO CONSIDER ABOUT REMOTE POWER & LIGHTING CONTROL FOR LED & OTHER SMART FIXTURES.

INTERVIEWING ENTERTAINMENT LIGHTING EXPERT, PAUL RABINOVITZ

A lifelong lighting person, Paul Rabinovitz jokes that “being in lighting is not a career, it is a sentence.” He describes the business as one that gets in your blood and makes you become blind to other opportunities – but in a good way. “This is a great industry with a great group of people. I never feel like I’m selling – I’m solving problems,” and indeed he does.

Harnessing his vast experience in the industry and matching client and project needs with the right products and solutions Rabinovitz has enjoyed decade’s long success working in an industry that touches so many others. From corporate clients, to large venue design, stadiums and house of worship, he has watched the lighting industry grow and move from simple analog control to complex data networks.

With LynTec Rabinovitz has found a product that not only addresses an immediate need for circuit controls, but a way to implement best practices as a professional community to raise the industry’s collective “game”.

Always appreciative to work with companies that are considered best in class and unique, his work with LynTec has included identifying the market and product needs that consultants, dealers, system integrators and designers have with regard to circuit control and monitoring for AV and lighting systems.

This paper was developed based on an interview with Paul Rabinovitz, a lighting expert that has worked in all facets of the industry and now is President of PMRi, an innovative consulting firm dedicated to helping clients grow through innovation, integration and implementation.

THE NEED FOR REMOTE POWER CONTROL IS KEY TO FUTURE SCALABILITY

In Rabinovitz’ words, “LynTec has a solution to a problem that most people don’t know exists yet. As part of a designed system, every device has to have a branch circuit breaker – somewhere, someplace – so why not add to that system intelligent for on/off control at the panel to prepare your facility for whatever comes in the future?”

He notes that for a lot of people, in many of situations the need for remote power control and the options for web based monitoring may not manifest itself at first, but he argues that the thing about LynTec’s RPC circuit breaker panels is that it is not an expensive investment to proactively include on the front end, and it gives you security that you wouldn’t otherwise have in with a standard panel board product.



OUR Q&A BEGINS

Q. You've had a lifelong career in lighting and now you are the president of your own firm, can you tell us more about PMRi?

A. I started in the lighting business in 1980 – so I have over 32 years of experience working for companies like Teatronics, Xenotech and Strong as well as experience owning my own custom products manufacturing and design firm.

I have a deep understanding of the lighting industry and have enjoyed watching it evolve and grow. I have started my own consulting firm called PMRi. The P is for Product, the M for Marketing and the R for Relationships.

PMRi has its goal to help a variety of industry players be the best they can be. We do this through innovation, integration and implementation, that is what the "i" stands for in the name. We help clients by allowing them access to our expertise. In this way you can benefit from our experience without having to pay a salary and benefits package to a full time hire.

Q. LynTec contacted you about working with them. Can you tell us more about this?

A. I have been working on LynTec's behalf contacting lighting dealers around the country about on/off control and this has been a very interesting data gathering process. As I meet with dealers, integrators and consultants, we talk about lighting control and the movement from dimmers to on/off controls. It is amazing how many disaster stories these professionals have about projects that did not utilize on/off controls to monitor equipment.

Q. You mentioned that there is a huge problem we face as an industry with regard to smart fixtures. What is your take on this?

A. You cannot install a smart fixture, power it 24/7 and expect it to last forever. This is a misstep – oversight – by the lighting designers and facility designers to recognize the fact that this isn't like a fridge that can run all day and all night – we have to have to have power control to promote the longevity of the equipment.

Q. Why is power control so important and do you really have to power down the fixture completely?

A. When you don't have a way to completely power down and a sequential system for bringing systems back to life, you have issues.



ABOUT PMRi

PMRi is dedicated to helping clients develop the optimum mix of products, marketing and relationships to help them grow and prosper. Their mission is to use their 30+ years of product development experience and marketing know-how to launch new products, invigorate current products and processes to meet the challenges of today's difficult marketplace. They focus on innovation, integration and implementation and take a holistic view of the product life cycle and the marketing effort.



ABOUT PAUL RABINOVITZ

After working for a wide range of leading entertainment lighting companies, Paul opened PMRi to promote next-generation products and processes to a host of industries.

His firm's areas of expertise include: product development, marketing, relationship building, tradeshow management and design, website design, collateral materials, contract manufacturing, strategic planning, sales management and business development.

Contact Paul at pmri@pmri.biz.

ABOUT LYNTEC

LynTec brings to market electrical protection and circuit switching capabilities in the same enclosures. In doing so, the company has always found ways to save space, lower system installation costs and build trusted relationships with audio system and lighting designers. Its expansion into electrical and lighting controls, and now its growth into expanded lighting control, energy monitoring, built in power conditioning, and mobile applications continues to position the company as a leading resource for the AV and lighting industries and an integral partner for sustainable energy practices. For more information visit www.LynTec.com.

Fixtures have microprocessors which have power supplies, and these power supplies generate heat. Even though fixtures are set to operate at a zero levels they never really cool. So regardless of what the lifetime you've been promised for a fixture's light source, you will never achieve that useful lifetime because you are running the equipment continuously.

When a manufacturer tells you that this LED light source will likely last 50,000 hours – they probably have the test data to back that up. However the supporting components, things like fans and power supplies don't have the same longevity.

Fans and power supplies have notoriously low mean times between failures. People are blinded by focusing on the LED's lifetime ratings – but they miss the entire fixtures' rating. For certain, clients will be very disappointed down the road when they have only used their equipment periodically or for a portion of the expected lifetime and the fans and power supplies die.

Q. So what is the fix? How do we help designers better prepare their installs and their clients for this?

A. Fixtures have to be evaluated by their total ability to operate – not by the fact that one of their components is listed to last 25,000 – 50,000 hours.

Q. Wouldn't the dealer appreciate the opportunity to get back in front of a client after a failure so that they can repair or replace equipment?

A. Ultimately an unsatisfied customer is an unhappy customer so after you sold them on the long life of LED's now you have to face them three years later to explain why the power supplies or the fans need to be replaced. This damages your credibility and hurts the industry. Being proactive and planning for the ability to power down fixtures at the circuit breaker level can extend the life of the installed hardware. Clients need to know this, and designers and consultants need to include this functionality in their designs.

Q. So this brings up the classic debate since the beginning of electronics, is it harder on the fixture when you constantly power up and power down versus leaving it on?

A. Manufacturers that in the past have said turn them on and leave them on, have now shifted their positions and most manufacturers says there is no real difference in mean time between failures. I've always been of the belief that you turn something off when you're not using it. You will always have some kind of surge or other event when you are powering up and powering down product – but overall, you need to make the call based on utility. If you are only using the fixture or system 15 % of the time, you should lean more to the decision of turning it off.



Christopher Maione
ASSOCIATES
CLARITY·FOCUS·RESULTS

240 Main Street | Suite 611 | Northport, NY | 11768 | 631.759.0357
www.chrismaione.com

Q. Future proofing and planning ahead with regard to panel circuitry and lighting controls is key. Can you tell us why?

A. If you don't put the capability in from the beginning – then you don't have the ability to do it easily later. Electrical circuit retrofits can be a nightmare and expensive if you don't do it upfront.

Just think about it, you bought this new lighting rig because you wanted to save energy – holding wattage is low, but it adds up over time. Now, a storm comes, lightning strikes and you get hit with a big surge, your equipment takes the hit and you're left with damaged goods. Now had your equipment been on circuits that could be set and controlled remotely, you would have been able to completely power down and disconnect the system and avoided any damage to your systems.

Q. Why is the web based monitoring a value add for designers, installers and for clients?

A. Having LynTec's RPC as your intelligent circuit breaker system is the best way for a facility to manage for today and tomorrow because it has so much flexibility. You save on install costs because you can locate everything in one panel and it allows you to deal with what comes along this year, next year and for years after. Being able to see the system and work with it through the web based access saves time and money.

Q. If this kind of control is so important, are the dealers being receptive to its inclusion?

A. Yes and no, it's a little convoluted. There are lots of people that "get" LynTec and their philosophy for circuit control, but they are caught in a catch 22 – they understand the value, but sometimes since the owners don't know it is available, no one is asking for it.

This is where truly innovative products, like LynTec's can get stuck in the middle. Demand must be generated through the education of its value to the end user, but then we need a support structure in our consultants, designers, dealers and installers that can spec, design, sell and install the solution.

Once a designer says that he wants a controllable circuit breaker panel there has to be someone that steps up and says yes, we can provide you the panel and program it after it is installed.

Q. What do you think is the consultants' role in spreading this best practice?

A. Consultants are already open to designing at the mechanical and electrical engineering level so it is very easy for them to incorporate in their practices designs that start at the panel not after the panel. From a design perspective, if they accept it as a standard practice, the rest of our lighting and AV communities will follow.

Q. What is the best way for designers to incorporate the kind of scalability that circuit breaker control like LynTec's RPC provides?

A. There are many views of technical power but traditionally lighting and audio designers just assume there is power and start their designs just AFTER the panel board. The key is this, and it is CRITICAL – you have to include the panel board in your design specifications.

When dealing with advanced lighting and audio systems, a clients' power situation and their equipment is so much more involved than the power requirements for the facility's bathroom lights or kitchen fridge. The client has made a substantial investment in lighting and/or AV equipment – you have got to help them understand the importance of protecting these investments.

FINAL THOUGHTS

It is clear to see that the smart way is to think about systems is holistically and that includes the circuit breaker panel. The LynTec product really positions a facility to manage power and connected loads for the long run and enables them to control and monitor equipment to increase the longevity of overall systems and their performance.

Ideally, it is a three part formula that will move the industry to include remote power controls for circuit breaker panels as part of good design practice. Owners and clients need to be educated on its value. Consultants need to advise clients of this value and include this equipment as standard practice in their

specifications and designs. Finally dealers can provide the team of integrators that supply clients with the installation, programming and support that clients deserve. With all of this in place, the trifecta will always deliver a win, win and project success.

ABOUT CHRISTOPHER MAIONE - Christopher Maione is a recognized leader and expert in the AV industry with over 28 years of audiovisual expertise. His forward thinking and progressive approach to business led him to found and become the



managing partner of one of the world's leading AV consulting firms earning the company accolades as a leader in AV solutions and technologies. In his new company, Christopher Maione Associates, Maione employs the same stringent procedures and protocols that enabled his previous company to achieve global success and a reputation for the highest quality of work. Maione now focuses his attention on AV System Integrators, Manufacturers and Fortune 500 clients to help them identify strategic ways of handling their clients, products, & projects. Maione has a talent for forecasting trends and identifying emerging technologies that substantially impact the AV industry. Based on his own business model, he encourages colleagues to strive for excellence and consistently challenges the AV industry to improve its practices, grow its services, and develop better products in an effort to set a higher standard and respond to the

changing needs of clients. Well versed in all aspects of AV, IT, Integrated Technologies, Industry Standards, Green AV and best practices and protocols, Maione is an Adjunct InfoComm Faculty Member and CTS-D/CTS-I provider and serves on a variety of key industry standard committees. In doing so, he continues to set industry benchmarks for quality & compliance. For more info please contact info@chrismaione.com.



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