



# CONNECTIONS

Western Ohio Chapter • National Electrical Contractors Association



Published for members of NECA, Western Ohio Chapter • IBEW Local 82 • Miami Valley Business Community

January, 2018

## URS...16th Annual Telethon

The United Rehabilitation Services (URS) held their sixteenth annual telethon at WDTN TV Channel 2 studios on Sunday, December 3, 2017. The presenting sponsor this year was the Western Ohio Chapter of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local 82. Several volunteers were on hand to take calls from donors.

This is one of the biggest fundraisers for the URS and raised over \$115,000! But more donations are rolling in because last year, the URS established a payment plan for donors, thus ensuring monthly

donations. Executive Director Dennis Grant was elated with the number of volunteers that participated in the telethon. IBEW Local 82 Business Manager Greg Gust indicated that IBEW Local 82 has



IBEW82 volunteers Business Manager Greg Gust (left), Jody Steinbarger (third from left) and Christina Ashburn (fourth from left) take contributions at the telethon.

contributed over \$66,000 to the URS in the last few years. "I recommend that everyone take the opportunity to take a tour of the URS facility," says Greg. "It is humbling to see

the work they do and it will win over your heart."

A big thank you to the volunteers who fielded the phones for donations during the telethon: Greg Gust, Christina Ashburn and Jody Steinbarger all with IBEW Local 82.

For over 50 years, URS has been providing hope for families around the Miami Valley. The URS began in the 1950s as an informal support group created by parents advocating for their children with cerebral palsy. The URS offers a wide variety of services for people with disabilities and their families including: adult daycare, adult latch key,

augmentative communications, childcare, hearing aid service, physical therapy, occupational therapy, speech pathology and vocational training. With more than 12 special events each



WDTN Anchor Mark Allan (left) interviews Business Manager IBEW Local 82 Greg Gust.

year, volunteers are essential to their success! Everyday URS relies on individuals, companies and community groups to fulfill their mission of enhancing the quality of life for their clients.

For more information visit [ursdayton.org](http://ursdayton.org).

## CRT upgrades *Louisville Public Media*

Louisville Public Media recently completed a \$7 million infrastructure upgrade and put a fresh face on their storied station.

In 1950, the mayor of Louisville Kentucky and the director of the Louisville Free Public Library launched the city's first public radio outlet, 89.3 WFPL, as a single 10watt FM station. The launch predated the first National



Edit Room A with new Wheatstone sideboard and other upgrades.

Public Radio broadcast by 20 years and the Public Broadcasting Act by 17 years. LPM moved to its current home in 2000, a building that has endured for more than 200 years.

The station required a complete redesign and renovation of the facility. Their vision included new offices upstairs, an expanded newsroom, a larger lobby, an updated performance studio, a new music library, new equipment and updated studios. LPM has three on-air studios, one flexible talk

Cont'd pg. 2

# Circadian Lighting *and your health*

The lighting industry continues to explore the potential for lighting solutions to benefit and optimize human health. Studies indicate light has physiological effects that go beyond vision. In recent years, the industry has focused on the light of the human circadian system and how electric lighting choices can affect circadian health.

The circadian system produces and regulates bodily functions based on 24-hour cycles, or circadian rhythms. A big example is the sleep-wake cycle. Disrupting circadian rhythms can contribute to poor nighttime sleep, increased daytime napping, and greater risk of depression, obesity, diabetes and seasonal affective disorder.

The daily change from light to dark is the primary stimulus for synchronizing circadian rhythms to our location. The human eye has

cells that are receptive to light and connect directly to the brain's master clock, converting light into neural signals that regulate circadian rhythms. For millions of years, the sunrise-sunset cycle performed this job, but in the modern era, we rely on electric lighting systems.

Traditionally, these lighting systems are designed from vision, disregarding light's nonvisual impact. Mariana G. Figueiro, Program Director at the Lighting Research Center (LRC) at Rensselaer Polytechnic Institute, Troy, NY indicates there are four major factors in designing a lighting solution that optimizes circadian health.

First and foremost is intensity, the quantity of light

falling on the eye's photoreceptors during the day. Second, is spectral power distribution – the combination of light wavelengths the light source emits. Circadian regulation is most responsive to short-wavelength light (460



nm or "blue"). Meanwhile, longer wavelength light ("red") can produce an alerting effect. Finally, timing, duration and photic history also are important – when the light is received, how much light cumulatively falls on the eye

throughout the day, and previous light exposure.

"Architectural lighting isn't just for vision anymore," Figueiro said. "Clients are increasingly requesting and expecting lighting systems and applications that can support human health and wellbeing." People are the most important asset of an organization," she continues. "Why not provide them with the best lighting? Providing occupants with proper circadian lighting is similar to providing them with ergonomic chairs or flat-screen computer monitors."

The LRC, through various studies, has developed a circadian stimulus (CS) metric. The CS calculator is a free tool designed to help lighting professionals choose light sources and levels ideal for circadian stimulus. *For more information regarding their studies, see EC magazine, December 2017, article by Craig DiLouie.*

## CRT, cont'd.

studio, three full-feature production studios, three edit bays, and two voice booths.

The studio furniture was supplied by Vince Fiola at Studio Technology and installed by Chapel-Romanoff Technologies. CRT Project Foreman Doug Ribsbee says that the project went smoothly, but working around LPM's schedule presented a challenge. Because they had to maintain continual operations during the build, Luckett & Farley Senior Architect Paul Sirek scheduled the studio renovations in pairs, taking one production studio and one live studio down together for about two weeks at a time in what he calls a "leap-frog" designed to maintain

continuity of operations. They all had to work evenings and weekends to meet deadlines.



*WFPK Studio 1 with Wheatstone LX-24 and VX drop-in and ENCO DAD.*

### Digital Upgrades

Ribsbee directed the removal of the existing analog broadcast system, as well as the installation of new

equipment and network infrastructure, an in-house background music system and conference room AV systems.

CRT Engineer Mark Cohea worked with Wheatstone Sales Engineer Phil Owens to create design documents for the project. LPM was already running Wheatstone D500 consoles in

the studios and they stayed with Wheatstone, partly because of familiarity of operation and ease of transition for the operators. They upgraded to a

Wheatstone Balde-3 network with 37 blades accommodating 192 digital and 148 analog inputs and outputs. Additional systems were installed throughout the facility including: new consoles in the air studios, new boards in the talk studio and edit bays; new CD equipment, and a new VOIP phone system. Thanks to CRT, WFPK now has a state-of-the-art facility.



January, 2018

Your comments, suggestions and questions are welcome! Contact the Western Ohio Chapter - NECA.

e-mail: info@wocneca.org  
website: www.wocneca.org  
phone: 937-299-0384  
fax: 937-299-7322

# Consumer Electronic Show 2018

The annual Consumer Electronics Show (CES) took place January 9-12 in Las Vegas. Undoubtedly the most innovative event in the world, CES features gadgets from manufacturers designed to both show off their technical achievements while giving consumers a glimpse of what will soon be on store shelves. Whether people decide to purchase said products is another story. However, several items can truly enhance the lives of people who may require a little assistance.

## Smart Shoes

Created by a French startup called E-Vone, comes “smart shoes with falling alert.” As the name suggests, the kicks feature a system that will notify friends, family or medical services if the person wearing them happens to take a fall. The company says they’re designed for older adults (like your grandma or grandpa), as well as construction workers, hikers or anyone who feels like they may require assistance if they’re alone indoors or outdoors. Inside E-Vone’s shoes, specifically the midsole, there are a slew of sensors: GPS, accelerometer, gyroscope and a pressure system that knows every time someone puts the shoe on and activates the alarm. According to E-Vone, they don’t need to be paired to a mobile device because the shoe processes all the information on its own, thanks to a GSM chip, GPS



and LoRa antennas, which can send the bad news with “ultra-precise” geolocation details.

## Xenoma e-skin pajamas

Smart clothing isn’t a novel concept, but Xenoma makes use of the technology in an inventive way: to grant dementia patients more



independence. All told, the company’s prototype pajamas can detect motion, monitor heart rate and connect to an ECG. The hope is that eventually patients can roam freer inside hospitals and assisted-living homes without needing to be confined to rooms or kept under observation.

## Whill Wheelchair Model Ci

Whill won the Best Accessibility Tech award at last year’s CES after it unveiled a compact wheelchair nimble enough to pull off tight turns and work on myriad surfaces. This year’s Model Ci is even lighter, with a more portable design



that can easily be dismantled for travel. And it’s available now.

## Neofect NeoMano

For those who may be wheelchair bound with limited use of their hands, Neofect has developed a robotic glove that connects to a rubber pad that



can be controlled with an elbow or arm. When activated, the glove allows paralyzed users to pick up objects as heavy as about 2 pounds. Neofect’s prototype glove is lightweight, easy to put on and simple to use. The company is planning a Kickstarter toward the end of the year and expects it to cost less than \$1,000.

## My Special Aflac Duck

The My Special Aflac duck is designed to support children diagnosed with cancer. It’s good for medical play, with features like a port-a-cath with an RFID chip for children to familiarize themselves with the chemotherapy process. It has RFID-enabled emoji cards so children can use the duck to express their emotions.



It’s also just a fun, cute and cuddly toy. Aflac hopes to get a My Special Duck in the hands of all children diagnosed with cancer in the U.S., free of charge.

## Reflexion Edge: Virtual Reality at its best

For this Pennsylvania startup, helping schools identify potential brain injuries in young athletes is a personal mission. Its first product — the



Edge, a foldable, touch-sensitive light panel — builds a performance baseline through Whac-A-Mole-style tests that can be quickly checked against after a player takes a concerning hit. Two high schools have already signed on to trial Edge, and the device is in the second phase of a clinical study at Penn State University.

One thing to be sure of is that Alexa is here to stay. Between smart mirrors, showers, faucets, bathtubs, refrigerators, lights, cars, TVs, and more, speaking to devices is the next “touch screen” for all electronic devices. Smart houses, cars, and personal assist devices that were once futuristic, are here now!



Presorted  
Standard  
U.S. Postage  
PAID  
Dayton, OH  
Permit 644

### In This Issue

- URS Telethon
- CRT/Louisville Public Media
- Circadian Lighting
- CES 2018



[www.wocneca.org](http://www.wocneca.org)



## Upcoming Events

*The Builders Exchange of Dayton and the Subcontractors Association of Western Ohio have joined together again to offer the*

***Fifteenth Annual Team Building Night  
February 8, 2018***

***Sinclair Conference Center Great Hall  
4:00pm - 7:30pm***

**BX Craftsmanship Awards  
BX Project Manager Award  
SAWO Subcontractor of the Year  
SAWO General Contractor of the Year  
and many other industry recognitions.**

**This Annual Event is a great way for area industry associations to highlight their members and showcase their latest successful projects. For more info: [bxdayton.com](http://bxdayton.com)**

### The Western Ohio Chapter - National Electrical Contractors Association Directory:

#### NECA Members

Chapel Electric Company  
Chapel-Romanoff Technologies  
ESI Electrical Contractors  
GEM  
High Voltage Maintenance  
Kastle Electric Company  
Kastle Technologies  
Maxwell Lightning Protection  
RMF Nooter  
Sidney Electric Company  
Studebaker Electric  
Wagner Industrial Electric  
York Electric, Inc.

#### Affiliate Members NECA

Advanced Service Technologies  
Becker Electrical Supply  
FD Lawrence Electric Company  
Graybar Electric Co., Inc.  
Heapy Engineering  
Riffe & Associates  
Square D / Schneider Electric  
Uptime Solutions

#### Associate Contractors

Automated Controls  
Capital Electric  
Compass Electrical Solutions  
Copp Systems Integrator  
Cougar Electric, Inc.  
Electricity, LLC  
Glenwood Electric  
Justice Electric  
Lake Erie Electric  
Mid City Electric  
Power Pro  
Power Services  
Productive Electric  
Spurling Electric Co., Inc.  
Triad Electrical  
Wilson Sign Company

**Western Ohio Chapter - NECA  
3131 South Dixie Hwy. Ste. 415  
Dayton, OH 45439**

