

# SMARTRONIC

Automation Magazine

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## CROWD BEAMER

The crowd beamer device brings the benefits of real-time presentation sharing

## LEVITON Room Controller

Leviton announced today the development of the new Wireless Room Controller System and App, the first and only system on the market compatible with Philips Instant Fit LED lamps with Easy Smart Technology to both you and your audience, anywhere you want.



## Denon HEOS AVR

combines surround-sound capabilities with whole-house audio features

## Surge Protectors Get Smart

Power strips are practical little devices. In addition to providing a place to plug in a half dozen devices, they keep power cords tidy and encourage you to get rid of unsightly extension cords



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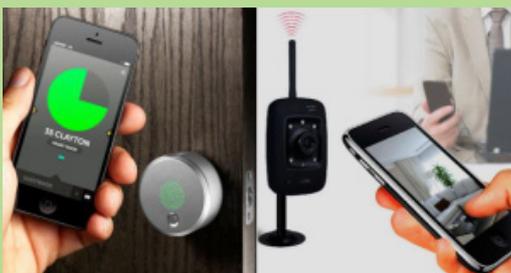


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## SKAA

### The New Wireless HiFi Audio Standard

- Ease-of-use, crazy flexibility, and rock solid QoS are the value proposition of SKAA. To put it in basic terms, SKAA is ridiculously easy, you can use it in thousands of ways, and it's the most reliable wireless audio solution out there



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## Are Smart Homes Safe FROM HACKERS?

- Hackers can remotely disable a thermostat and demand a ransom to return it to working order, or gather sensitive information about its owner. It's the risk of anything wireless and convenient

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# Denon HEOS AVR

NO ORDINARY AV RECEIVER

**Denon's HEOS AV receiver combines surround-sound capabilities with whole-house audio features.**



At a first glance, the Denon HEOS AVR may not look like a standard AV receiver, and that's because it isn't. The HEOS name should be the big give away as to what Denon intends for this device – a hub for those wanting a complete multi-room audio system.

Of course, Denon isn't being completely misleading with the 'AVR' in the name. It still packs 50W per channel of Class D amplification and standard speaker terminals on the back for wiring up a 5.1 speaker system; sadly, the HEOS AVR is incapable of supporting DTS:X and Dolby Atmos audio formats.

## SAY HELLO TO THE HEOS AVR.



Instead, the Denon HEOS AVR has been specifically engineered to work with wireless speakers from the HEOS range. This means you won't have to worry about having wiring installed.

That's similar to the approach Sonos takes with its speakers, which is unsurprising given HEOS is a direct competitor to Sonos.

As part of Denon's drive to cut wires, the company has worked tirelessly to add support for pretty much every streaming service and file format you could want. This includes WAV, FLAC, ALAC and DSD, as well as streaming services such as Spotify and Deezer.





As this is still an AV receiver, the HEOS AVR provides support for four HDMI devices for connecting devices such as Blu-ray players and set-top boxes. All of the ports also support HDMI 2.0a and HDCP 2.2. It can be used wirelessly for surrounds with any pair of HEOS speakers or HEOS Amp with passive speakers. Because it uses the 5GHz band, it has no latency and low loss of available zones

# Shenzhen Pilot Technology Co., Ltd



Pilot Labs

**Application:**

- See your home from smartphone when you are out
- Monitoring your kids and infants
- Care for the elderly
- Guard your Home
- Guard your car
- Guard your shops
- Care for your pets

## Ip Camera



**Application:**

- Apply to your doors and windows
- Monitor unexpected intrusions
- Care for your family and pets



## Contact Sensor

**Application:**

- Monitor illegal invasion with contact sensor or vibration sensor
- Care for your family in emergency

## Smart Beacon



Add: 2nd Floor, B1 Blvd, Digital Technology Park, High Tech Park,  
Nanshan, Shenzhen, Guangdong, China

# BENEFITS OF A DEDICATED TOUCH SCREEN



A few years ago, a little thing called the “app” altered the way people interact with the electronic systems in their homes. With only a swipe and a tap, smartphone-loving homeowners were in complete charge of everything from thermostats and light switches to complete home automation systems. Convenient? Absolutely. And who can deny the cool factor associated with whipping out a phone while on a date to get the house ready for an impromptu nightcap? With so much hoopla surrounding control apps, it can be easy to forget about one of the most respected user-interfaces available: the dedicated touch screen.



Don't let this tried-and-true mode of control slip your mind, though. The dedicated touch screen, like the new 7- and 10-inch models from Control4, offers a wealth of benefits that no other type of interface can match. The user-interface on a touch screen presents a great deal of information about your house—all in high-resolution quality—from reviewing the current settings of your home's thermostats and lights, to receiving a status report of electronic door locks and viewing the current weather forecast. With all the pertinent data at your fingertips, organized and laid out in a manner that's easy to read, the touch screen is arguably the most engaging and intuitive of all user interfaces.

Even as new features get added to a touch screen, like the HD camera, hi-fi speakers and microphone that Control4 recently added to its 7- and 10-inch models, its user-friendliness is never compromised. In fact, with each new function, a touch screen becomes an increasingly more powerful and valuable home control tool. Touch screens are a fast and responsive user interface

that's always there ready for you to interact with your home. There's no need to boot up or wait for an app to load. You're in charge of the electronic system in your house, instantly.

Then there's the convenience factor. You may not be able to carry a touch screen in your pocket like you can your app-enabled smartphone, but unlike your phone, a touch screen is always right where you left it, never lost between the cushions of your couch. Plus, it's always powered up and ready to shoot off commands to all the connected devices in your house. When you're ready to add automation system to your home or update your existing system, be sure to plan for at least a few touch screens. Positioned in the common areas of your house, like the kitchen, family room and foyer, they'll give you a quick, easy and reliable way to monitor, manage and control your home environment.

Which self-respecting couch potato  
gets up to control the lights.™



smart living

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TECHNOLOGIES (P) LTD.

# CROWD BEAMER



The crowd beamer device brings the benefits of real-time presentation sharing to both you and your audience, anywhere you want.

It's portable. It doesn't require an internet connection. It shares any type of content, including video. And it delivers up-to-the-minute handouts to your audience, without the need for any paper.

For starters, crowd beamer offers great ease of use to speakers.

Crowd beamer is not dependent on the Internet. Consequently, as a speaker, you no longer need to worry about a good Wi-Fi connection says co-founder Hans Romaen. "You offer your audience an innovative, unique service which enables them to store images right on their own device, as well as adding notes. Moreover, this is a sustainable solution because, thanks to crowd beamer, there is no more need to hand out printouts of presentations." Also, since the system immediately disseminates information, presentations no longer need to be transmitted in advance, resulting in additional time savings for the speaker.

## **A superior experience for the audience**

Using our free mobile app, your audience gets your content delivered on their laptops, tablets & smartphones.



Getting a clear view of what you present, everybody stays focused on what's relevant for them – deciding which content to capture, and how to add notes, mark text, attach tags, ... and build a private library of personalized information, sync it to the cloud, or save it to Evernote or Microsoft One Note.

### **Present any way you want**

Real-time presentation sharing with crowdbeamer works great just by itself, or with any of the technologies you are already using today. Simply connect our easy-to-use device to your projector, flat panel display, videoconferencing system, wireless presentation system, ... and start presenting.





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# LEVITON

## Room Controller



Leviton announced today the development of the new Wireless Room Controller System and App, the first and only system on the market compatible with Philips Instant Fit LED lamps with Easy Smart technology. Easy to install controls within this system include keypad room controllers, wireless occupancy sensors and a wireless photocell, enabling LED dimming and control retrofits with no fixture wiring changes. “Leviton is excited to offer the first wireless controls that are compatible with the Philips easy Smart technology,” said Richard Westfall, vice

president and general manager of Leviton Energy Management, Controls & Automation. “Together, Leviton and Philips Lighting are making product selection and installation simple for commercial users who want to retrofit their lighting system.”

The keypad room controller wirelessly communicates and coordinates all connected Lumina RF devices and easy Smart equipped LED lamps via a mesh network. Setup and configuration only requires the Leviton App on a smart iOS or Android device.

Available in 1, 2, 4 or 8-button models, the keypad room controller (DLDNK) provide dimming and scene control and provides the primary user interface. The keypad can also be used as a remote keypad for 3-way switching applications and customized operation. Wireless occupancy sensors (ZSC04/ZSC15) control the loads directly and can be configured for occupancy (auto-ON/auto-OFF) or vacancy (manual-ON/auto-OFF) sensing. The wireless photocell (LURPC) detects light levels and maintains the day lighting target level for areas receiving ample ambient lighting.

Philips instant Fit LED lamps with easy Smart technology convert existing lighting to LED by simply replacing lamps without replacing current ballasts or requiring complicated rewiring to achieve dimming. EasySmart technology allows the lamps to wirelessly communicate to the keypad room controller and dim based on user preference or daylight harvesting settings.”Philips Lighting’s approach to smart innovation includes both advancing what is possible with LED lighting and making it easy to install and apply,” said Bertrand Vandewiele, LED product marketing lead at Philips Lighting. “Our easy Smart technology, in coordination with the Leviton Wireless Room Controller System, is a perfect example to demonstrate that intelligent, connected lighting and simple programming and installation do not have to be mutually exclusive.”

The Wireless Room Controller System meets IECC, ASHRAE 90.1 and Title 24 requirements for space/area control, dimming, vacancy sensing (manual-ON/auto-OFF), occupancy sensing (auto-ON/auto-OFF), automatic shutoff and multi-zone day lighting.





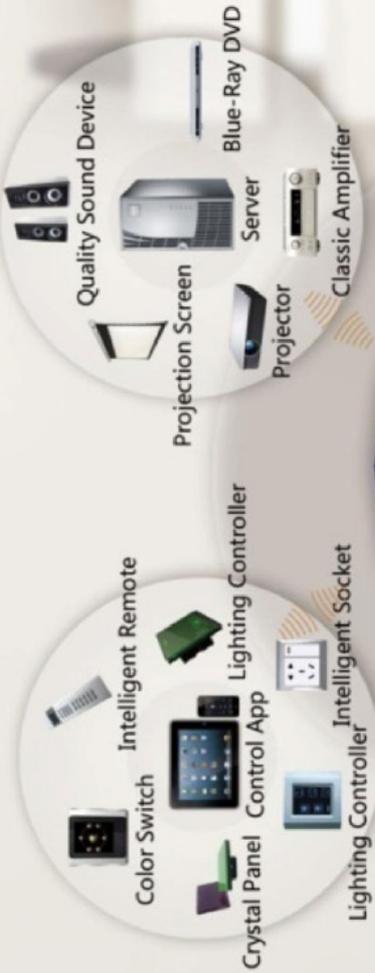
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## Intelligent Security System

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## Intelligent Information Terminal

Comprehensive Multi-media Terminal Enables You A Luxurious and High-Grade Life.

# Surge Protectors Get Smart

Power strips are practical little devices. In addition to providing a place to plug in a half dozen devices, they keep power cords tidy and encourage you to get rid of unsightly extension cords. In some cases, power strips - or more appropriately, “surge protectors” - provide some degree of protection against potentially damaging lightning strikes and electrical spikes and dips. But beyond that, the common power strip is fairly unsophisticated.





Still, it pays to peruse the packaging to find out what, if any, level of protection a power strip offers, keeping in mind that some so-called “surge protectors” don’t actually have any protection capabilities. You’ll find terms such as “clamping voltage,” which specifies the voltage threshold at which protective circuitry becomes active; a “joules rating” that defines how much energy the device can theoretically absorb; and “response time,” which specifies (in nanoseconds or microseconds) how long it takes for protection to kick in when there’s an electrical event.

As you move up the price ladder, you’ll notice that some models even offer a warranty. Read the fine print to see what’s covered.

If you’re willing to spring for a high-performance “power center,” expect to receive a higher level of protection for valuable AV gear and office equipment as well some interesting and useful smart features. Here’s a glimpse of the kinds of connected capabilities you can expect to see:

### **Energy management**

Several options are possible, including the ability to kill power to TVs and AV components when they’re not in use - like in the middle of the day or during the wee hours of the morning. Ordinarily when components are in standby mode, they still draw residual power.

Some power centers come with monitoring software that enables you to see how much juice an amplifier (or whatever) is pulling and what it costs you to



operate. Once you're able to analyze power consumption, you'll be surprised how much electricity certain devices gobble up. Portable heaters and compact refrigerators, for example, can be real power hogs - especially if they're more than a few years old.

### Controlled power-up

Some power centers are smart enough to bring a downed AV system back to life in a controlled, sequential manner - turning on the amplifier before the receiver or preamp, for example, to protect your speakers from the dreaded "pop."

### Self-diagnosis

The smartest of smart power centers can sense when an Internet connection is lost and automatically reboot the outlet feeding your modem or router.

### Remote control

Some power centers can be controlled via a smartphone so you can "reboot" a specific outlet when you need to reset a frozen router that's giving your kids an excuse to avoid their homework. By the same token, you could play poltergeist and mysteriously turn off the TV to ensure homework gets done without distractions. All this from your office.

### Remote notification

Imagine receiving an email that alerts you of a power outage and another one that notifies you when power is restored. Yep, a smart power center can do that, too.

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# What is Light Control?

Quality lighting is an important aspect of our daily life, and is often taken for granted. Light control is the ability to regulate the level and quality of light in a given space for specific tasks or situations. Controlling light properly not only enhances the experience; it helps to save energy by using light when and where it is needed most.

## The Benefits of Dimming

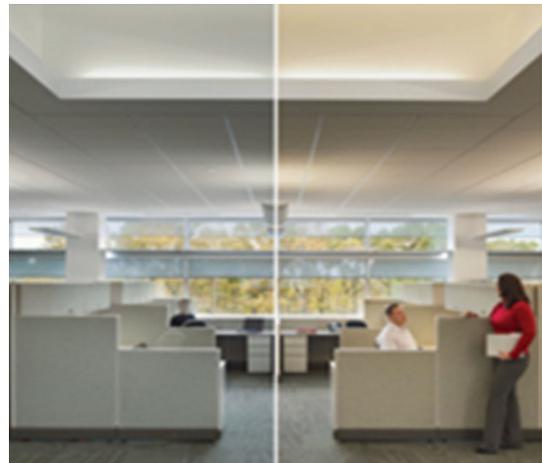
In the average home, most light controls are a simple on/off switch, rather than a dimmer. This means that whether it's the middle of the day or it's nighttime, your fixtures are putting out the exact same amount of light. In fact, light switches are one of the few appliances that only have two settings – on and off. Through dimming, users can control the quantity of light their fixtures provide to fit specific tasks, moods, or situations. This not only improves the experience, but also saves wasted energy in the process.



## Dynamic Lighting

The color of light has a significant impact on the aesthetics of a space, and supports occupant comfort and well-being. Based on the needs of the space, the color of LED lighting can be adjusted using dynamic lighting strategies – warm dimming, tunable white, and/or color tuning.

Lutron LED lighting control systems can use dynamic lighting, as well as dimming and daylight management; to either automatically or manually adjust the color of the LED light to create the perfect environment for any indoor space.



# Daylight Harvesting

In addition to managing electric light, regulating the amount of daylight that enters a space is an important aspect of light control. By using shades in conjunction with dimmers, Lutron systems can create the perfect balance between the two sources of light to save energy and create an inviting environment. Dimming modifies the quantity of electric lights, which in turn are complimented by the proper shade fabric and control that filters daylight. Together they save energy while providing the right amount of light for specific tasks or situations.



# Total Light Control

True light control reaches further than shading and dimmers. Lutron light management systems and equipment can make lighting a vibrant and vital part of any space. Daylight sensors, for example, can automatically adjust shades and overhead lights to maintain the perfect look throughout the day, while occupancy sensors can ensure that lights are never left on when a room is not in use.



More sophisticated systems like the RadioRA2 can store personalized settings for multiple lights, allowing you to completely tailor the lighting scheme in any room. Selecting a scene is as simple as pressing a single button. The system can also be programmed to transition between scenes at different times of the day.

Preset lighting can have other benefits aside from ambiance and energy savings. Lighting can be set to increase your space's security and safety. Advanced systems like HomeWorks® can work in conjunction with a security system to switch on all lights if an intruder enters a home, simultaneously warning the trespasser and ensuring that law enforcement will know exactly where they are needed.

Lutron solutions provide the right quantity and quality of light in your environment. With such precise and powerful control, you can completely craft the look and feel for any space, as well as its functionality and efficiency.



# K-BUS®

## Home and Building Intelligent Control System



### Temperature Control Panel CHTC-86/01.1.1.1.1



#### Functions

- With capacitive touchscreen tech., and high-contrast screen to achieve excellent display
- The panel has its own sensor to detect and display room's temperature and humidity
- Function of temperature control, with temperature control algorithm by itself
- Function of cycle timer
- Display clock and week. Time can be updated via KNX net
- Backlight brightness is adjustable
- Function of warning tone: Panel warns when button is pushed, and this function can be activated/ deactivated via ETS
- Fold input for thermostat sensor



### 7" Touch Screen CHVD-07/01.1



#### Functions

- It comes with function of smart-home control, and video-door phone (optional)
- With the breathing lamps around the base of screen and color adjustable lights
- With the function of proximity sensor. The screen starts automatically when people approach
- With the magnetic absorption application, the touch panel is easy to take and install
- Compatible with Android APP, and users can download and install it by themselves
- With multi-point touch screen,gravity sensor, vibration motor function
- The screen can be connected to KNX system directly, without via any converter



### 3.5" Touch Screen CHTF-35/00.1.01



#### Functions

- Firmware can be upgraded via TF Card
- Support up to 64 buttons, and they can be configured via configuration toolkit on PC and displayed in multi pages
- Support user defined icons for lighting scenario bind control functions
- Connect to KNX directly



### Smart Home Control Software

#### Functions

- Switching
- Dimming
- Air-conditioning
- Background music
- Security
- TV
- Scene
- Blinds&shutters
- Value sender



# GVS 视声集团

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# SKAA

The New **Wireless** HiFi Audio Standard

Here are many wireless solutions available, so, in layman's terms, why is SKAA the best wireless audio solution?

Keeping it simple: Ease-of-use, crazy flexibility, and rock solid QoS are the value proposition of SKAA. To put it in basic terms, SKAA is ridiculously easy, you can use it in thousands of ways, and it's the most reliable wireless audio solution out there.



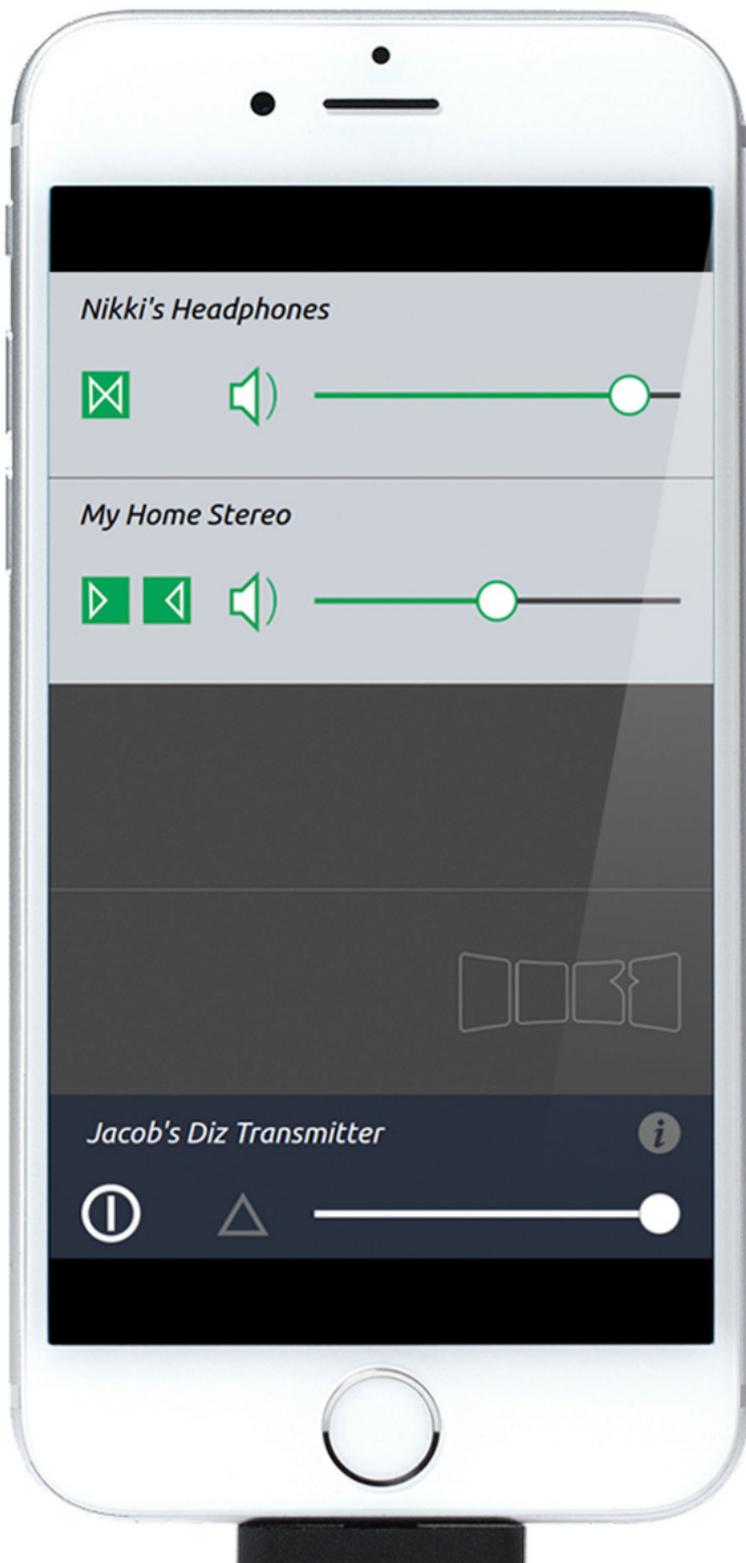


SKAA offers low latency, the best time alignment in the category (multiple speakers output the audio at exactly the same time), the greatest number of use cases since SKAA works across whole home, portable, headphone, home theatre, 12V and prosumer segments, no cumbersome pairing process, no content or source limitations, no network required (meaning no IT team needed to set up the system; no password to remember; no outages; no decrease in performance due to heavy internet traffic; etc.) we let Wi-Fi do what Wi-Fi was designed for and that is to reach up into the cloud for your content.

Speaking of flexibility and ease of use, SKAA also offers a free APP named SKAA CMD (pronounced COMMAND) for Mac OS, Android, iOS, and Windows operating systems. SKAA CMD is not required but if you choose to use it, it offers many valuable features. You may customize your speakers, headphones, and transmitters by giving them quirky, eccentric names. Know at a glance what devices are bonded and playing. Control each receiver's volume individually, or all together. Set up whether each is playing stereo, mono, left or right audio. SKAA cmd has all that, and more.

**Earlier it was mentioned that SKAA has low latency, so why is low latency important in wireless audio transmission?**

Do you remember the old Kung Fu movies where you would see the person speak on screen, then you hear the voice? Well imagine now watching a movie, you see the explosion then wait for it, OK now you hear the explosion. Not a good user experience at all. With SKAA's fixed low latency, this is not an issue. Hear the explosions right as they happen, not a second later! And while movies and video are certainly challenging, even much more challenging are games — Remember, games represent more than half of the apps sold on both iTunes App Store and Google Play. Due to the inherent latency in BT or Wi-Fi, watching video or playing high speed games with either of these technologies would either be a miserable user experience or not even possible at all. With SKAA, latency is not a concern.



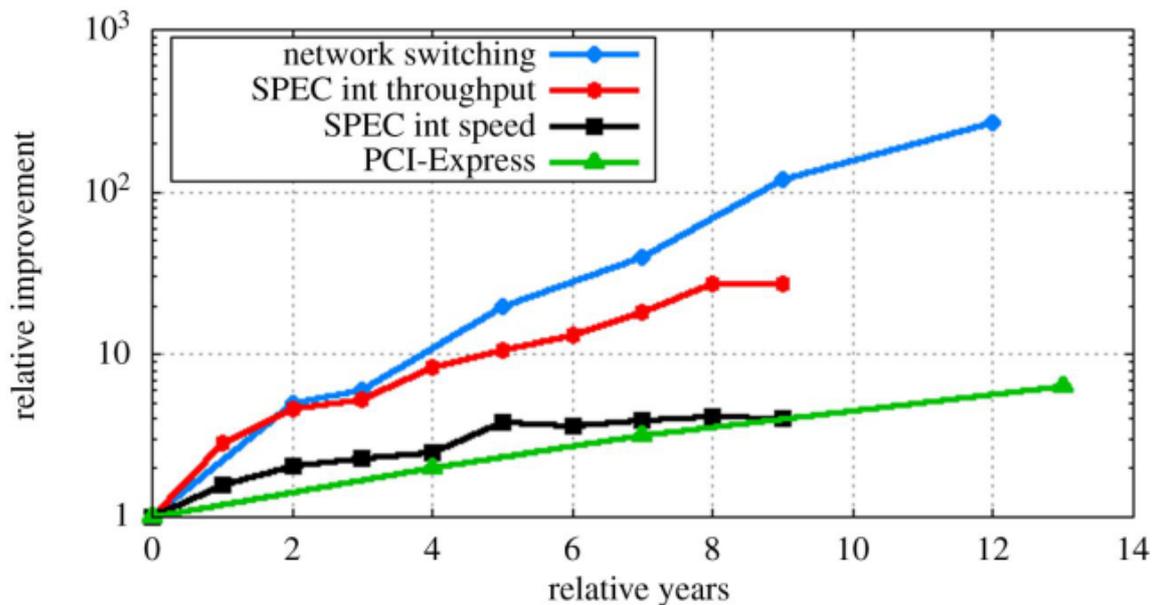
## **What do you mean by QoS (Quality of Service)?**

By QoS, I am referring to rock solid reliability, no interference, no pops, no drops, robust, great range- everything you want in a wireless system. If you experience good QoS you don't notice because you expect it. But if you have poor QoS, you definitely notice, it is very obvious. You hear talk about other wireless technologies and their deficiencies or difficulties in connecting or dropping out. What you don't hear is talk about SKAA issues because it just works fantastically, every time.<sup>5</sup> Bluetooth is ubiquitous, so how do you compete with something that is in everyone's pocket every day (i.e. mobile phone).

**Bluetooth is ubiquitous, so how do you compete with something that is in everyone's pocket every day (i.e. mobile phone)**

Bluetooth is for sure ubiquitous and that actually drives our quality-centric customers nuts. Imagine you're Bose or Harman and you've worked for decades to boost your brand equity —to make your name really stand for

quality. And now your marketing VP tells you that you HAVE to do put Bluetooth in your product. So your great acoustics, driver design, your brilliant amplifier design, inspired ID and user interface are all compromised because adding a weak link like Bluetooth is the weakest link in the whole product and our customers know it. This customer dynamic is actually what drove us to create SKAA in the first place.



Having said that, since BT is ubiquitous and we realize it isn't going away anytime soon, instead of fighting it we chose to embrace BT and actually put a BT onramp into our Nadja module. Nadja accepts a BT signal and then relays it out via SKAA to additional speakers. You can call it networked BT. Of course, the weakest link in this chain is BT itself. Imagine walking into your house, hitting play on your smartphone and your soundbar begins playing tunes but not only your SB but the audio is also transmitted out via SKAA to other SKAA speakers, such as a kitchen speaker, an outdoor speaker, etc... Nadja really combines the best of both worlds...the ubiquitous benefits of BT but with the additional benefits of SKAA.

### How many receivers (speakers) can SKAA broadcast to at once?

One SKAA transmitter (audio source) can send to four receivers at the same time. That's one SKAA cell. By the way, our Nadja cells are five speakers fed from one Bluetooth source.

I can also say that dual-cell SKAA transmitters are on the roadmap for 2017. So that's eight receivers from one SKAA transmitter.

Even more important to note is that SKAA was designed from the ground up to support multiple cells in a single home. Today you can have a home with five SKAA cells with no problem. Because that's today's world right? ... not one audio source in the house, but many of them. So you can have 20 SKAA receivers in your house today, if you'd like. And the cool part is every one of those receivers (speakers, headphones, receiver boxes) can choose with the click of a button which of those five audio sources its listening to.

### Looking forward a few years, how much better will wireless audio be and how will Eleven Engineering and SKAA be involved in bringing us to that level?

Wireless audio is currently dominated by BT and Wi-Fi, kind of like what old-school cell phones were prior to smart phones with functionality being basic and use cases limited. A few years from now, it will be a renaissance of flexibility. Such as the use case where you won't buy an expensive wireless system using WiFi only to find out you can't play a game with it or use wireless headphones. SKAA offers this capability today and of course we will not stop innovating.

# Complete IT Solution

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& ONLINE BRANDING**



# Are Smart Homes Safe FROM HACKERS?

Filling your home with smart gadgets can make day-to-day tasks a breeze, but how vulnerable are these devices to malicious hackers?



There are criminals out there looking to exploit smart thermostats and Wi-Fi cameras. Hackers can remotely disable a thermostat and demand a ransom to return it to working order, or gather sensitive information about its owner. It's the risk of anything wireless and convenient. Cyber security researchers fight back by dissecting smart hardware and finding weaknesses for manufacturers to fix before the bad guys get wise. We asked a few of these researchers to assess whether some common smart appliances left their figurative doors unlocked.

Ryan Speers and Gene Chorba work at Ionic Security in Atlanta. The company specializes in encryption, intelligently scrambling data so that only the intended recipient can see the information. Its clients include the Department of Homeland Security, making Speers and Chorba overqualified but enthusiastic about assessing a Wi-Fi sous vide, a slow-cooking heating element. Within six hours of testing, they got in. “We saw unencrypted and unauthenticated data coming from the

Next—to save him the time of duping us with an email scam—we gave the login information for our smart refrigerator app to Amir Abramovitch, head of research at CyloT in Israel, where he works with huge banks we can’t mention here. From across the Atlantic, he ran the refrigerator’s app on his iPhone, then used software called Burp on his laptop to watch communication between the app and the refrigerator’s data centers—instructions like “change the temperature to 34 degrees.” “It’s a process



device,” Speers says. “That meant we could ‘sniff,’ or monitor its communication with the user.” With the right tools, they could potentially alter those commands, like a hacker bent on maliciously overcooking your steak. Getting that far would typically require the attacker to be physically within range of the Wi-Fi network running the device. The attacker could, however, trick the user into opening a shady email attachment and get remote access.

called Man in the Middle,” he says. In this case, the refrigerator app sends information to the internet but it goes through his laptop first. “I could intercept the data,” he says, “then modify it.” Unlike the sous vide, the refrigerator’s transmissions were encrypted, which he worked around by finding a bug in the app. “If you could give me until the next issue, I could find the real weakness,” he says, “I really want to make it explode!”



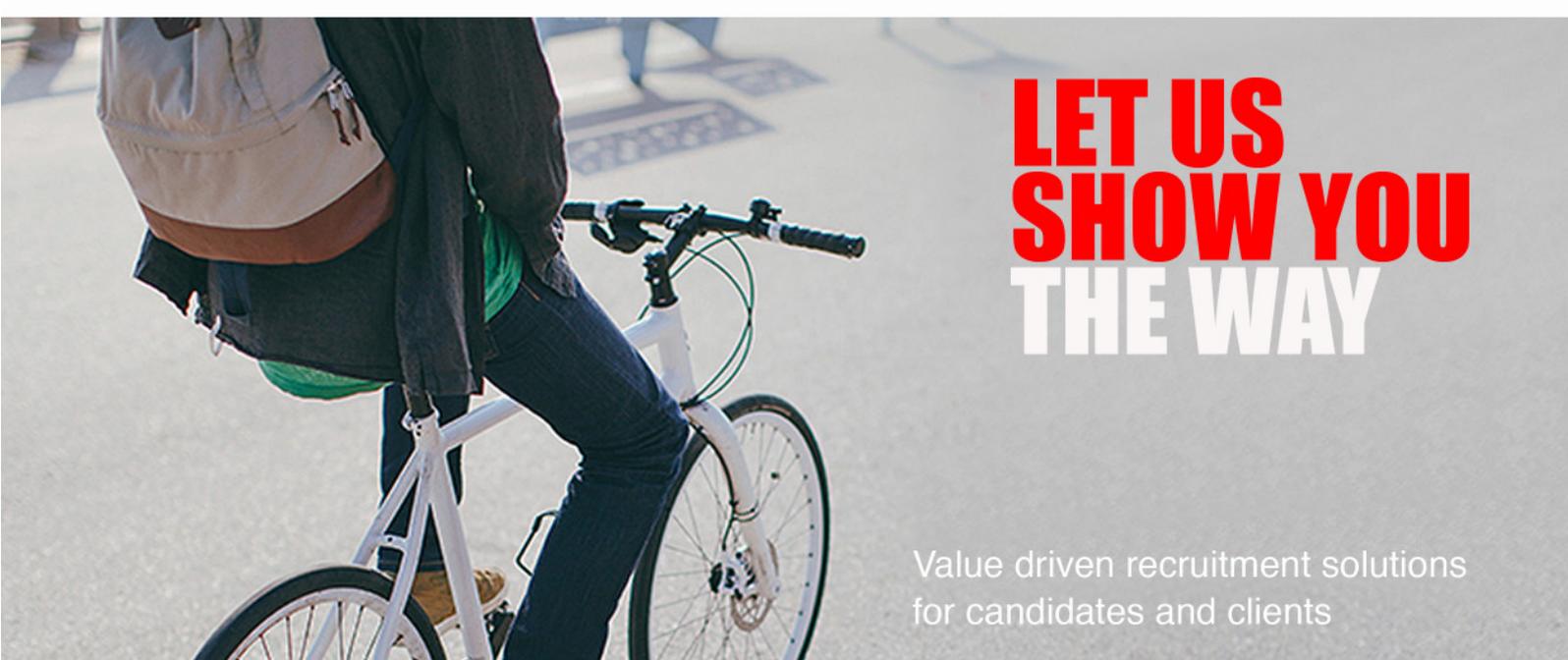
Since these innocuous appliances wouldn't be worth a criminal's effort, the more likely danger is a distributed denial of service (DDoS) attack. In these attacks, criminals remotely take over millions of smart devices and instruct them to send requests to major websites. In 2016, it happened to a company called Dyn, temporarily shutting down sites like Amazon, Reddit, and Twitter. "Say you have a pipe that can handle five gallons per second. A DDoS attack takes water from fifty different places and sends it toward that pipe, overloading it with information," says Zach Wikholm, a research developer and one of the first responders to the Dyn incident.

So, yes, smart devices are vulnerable, and they invite potential crime. But no need to buy only dumb devices. "The bad guys haven't found out how to make money off this," says Kevin Haley, director of security response at Norton by Symantec, the company that makes most of the world's antivirus software. "Not yet."

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# CAREER TALK

- 1. Estimation Engineer – ELV systems**  
DicoTech Qatar WLL  
5 - 10 Year(s) Doha - Qatar  
CCTV , Access Control System , Fire Alarm System , Fire Detection
- 2. Estimation Engineer- ELV, Security**  
JC & Partners  
5 - 6 Year(s) Dubai - United Arab Emirates  
ELV , Security Systems , Structured Cabling ,  
Active, Security System, BMS , Fire Alarm
- 3. Project Manager - ELV Technical**  
Accel HR Consulting  
6 - 12 Year(s) Dubai - United Arab Emirates  
ELV , Project Manager , Projects , Projects Management,  
ELV Technical, Estimation , Pre-Sales
- 4. ELV Sales Engineer**  
Delta Safety & Security  
5 - 7 Year(s) Bahrain - Bahrain  
CCTV , Fire alarm system , MEP , Structured cabling , Access control ,  
Security systems , Business Executive, Contractors , ...
- 5. Technician IT and ELV**  
Redcube Systems LLC  
2 - 4 Year(s) Dubai - United Arab Emirates  
ITI , CCTV , Structured cabling , Access control
- 6. Instrument (ELV) Technician**  
Engineering Maintenance Company Qatar (EMCO)  
5 - 6 Year(s) Qatar - Qatar  
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