WIRELESS CONTROLS



### INDEX

Introduction to Audacy	4	
Product Lineup	14	
System Setup	16	
Devices:		
	10	00.00
Gateway	18,	28-29
Plug Load Controller	19,	30-31
Luminaire Controller, Internal-Mount	20,	32-33
Luminaire Controller, External Mount	21,	34-35
Remote Switch	22,	36-37
Wall-Mount Switch	23,	38-39
Scene Switch	24,	40-41
Light Sensor	25,	42-43
Ceiling-Mount Motion Sensor	26,	44-45
Wall-Mount Motion Sensor	27	46-47





### ANTICIPATING THE FUTURE

The Audacy™ Wireless Controls system focuses on efficiency in all its forms. Faster and easier to install, you save time and costs associated with build-out and renovation. And our streamlined wireless system allows you to better control your powered environment while advanced smart components minimize energy and lighting costs over time.

#### CONTROL EVERYTHING. SWEAT NOTHING.

The Audacy Interface is the brains of your operation. Uncomplicated and easy to program or adjust over time, it allows you to schedule power to your building hardware and systems or to affect change in real time.

Leading the competition, the Audacy Wireless Controls system brings together technologies that anticipate your future. Enabled for both Apple® and Android™ platforms, we integrate easily with your existing Building Automation System and provide 24/7 back-and-forth communication between you and your powered environment.

#### GET AHEAD OF YOUR GOALS.

In short, the Audacy Wireless Controls system delivers eco-friendly technologies that save you money - on the road to fulfilling the biggest priorities of your business and every business.





### MORE MANAGED. LESS MANAGEMENT.

The online Audacy™ Interface is where it all begins and ends. Customizable and proprietary to your operation, it's easy to configure and adjust and is accessible from Apple® and Android™ devices.

Intuitively organized around a framework of basic categories and simple inputs, the Audacy Interface enables management of every component installed as part of your overall system. Together, these components ensure 24/7 custom control of your environment.

Upload all your devices to the Audacy Interface via the mobile app during installation, and instantly begin creating schedules and establishing settings for your system. The Audacy Interface alerts your system with your schedule and setting preferences to achieve desired lighting throughout your facility.





### SIMPLIFY YOUR LIGHTING

On average, lighting accounts for 40% of building operation costs in most workplaces. The new Audacy™ Wireless Controls system by IDEAL® gives you more control over your lighting environment while saving up to 50% on your corporate lighting costs.

Crafted at the intersection of *simple* and *innovative*, the Audacy system reimagines wireless lighting control and represents the streamlined future state of lighting technology for commercial, industrial, education, retail, healthcare, entertainment and other uses.

#### SIMPLE

The Audacy™ system's online Interface is the brains of your operation. Uncomplicated and easy to set-up, our intuitive Interface allows you to configure and schedule lighting in your space. You define the rooms that need control depending on the time of day. You control all of your system's hardware.

#### INNOVATIVE

In compliance with the newest ASHRAE codes and CA Title 24 requirements, our lighting system answers the call for more fiscal and ecological responsibility.

The Audacy system's proprietary electronics are engineered to provide 25 years of maintenance-free life. Every Audacy component is designed for easier system modification over time, ensuring next-generation utility.





### HIDDEN COSTS, HIDDEN CULPRIT.

Even appliances in the off mode can drain electricity from a standard outlet. In fact, "vampire" plug loads can account for up to 25% of your total consumption.\*

#### COMPLIANCE AND COST SAVINGS

Numerous new energy codes require plug load control in commercial and public buildings. Ironically, plug load typically accounts for a higher share of energy wasted in efficient buildings – up to 50% – than it does in minimally compliant structures.

#### AN OBVIOUS AND SIMPLE SOLUTION

Though often overlooked, plug loads in standby mode increase the cost of doing business while pumping unwarranted carbon emissions into our environment. Managing plug loads is a simple way to make an impact as the world pursues drastically reduced energy usage across all industries.

Audacy™ Plug Load Controllers are easily deployed in both new construction and renovation environments to affect instant and significant savings over time.

\*U.S. General Services Administration. Office of Federal High-Performance Green Buildings. (2015). Plug Load Nuggets. Retrieved from http://www.gsa.gov/portal/content/178115



# CONFIGURE YOUR SYSTEM TO...

#### **HARVEST**

as much daylight as possible by setting minimum or required light levels.

#### **MAXIMIZE**

your employees'
comings and goings
by minimizing
energy use in empty
rooms.

#### **SCHEDULE**

lights and plug load on or off based on your designated work hours.

Or use your system to dim or brighten any room or room group remotely at any time.

#### **USER CONTROLLED**

Let your employees manage their own light levels by assigning specific levels of user control to individual employees. Or, use any Audacy™ Switch to override any light setting while using a specific room.

#### MANAGED REPORTS

Your online Audacy Interface provides an immediate and more robust understanding of your lighting costs. Forecast more effectively. Conserve more effectively. Or link up with your Building Automation System (where applicable) for even greater convenience and control.

#### FIND OUT MORE

Compared to other competitive solutions, installation for an Audacy Wireless Controls system can take up to 85% less time.

CALL US TODAY FOR A CONSULTATION – AND LET AUDACY BRIGHTEN UP YOUR TOMORROW.

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### THE AUDACY™ LINEUP

The entire Audacy™ system is sleek – With every component boasting unparalleled function and flexibility.





The primary control device; each Gateway coordinates fixtures and sensor components, in the manner that they were grouped together, and provides 24/7 communication with your Audacy Interface. Each Gateway is the "enforcer" for all of your program inputs.



Ceiling and Wall-Mount devices that require no wiring and sense occupancy and/or vacancy. Motion sensors communicate with each Gateway to "alert" occupancy status, ultimately signaling Luminaire and Plug Load Controllers to turn off devices.

Engineered to provide maintenance-free life.

### LIGHTING

Audacy™ by IDEAL® innovates boldly by offering a comprehensive and customizable lineup of easily-installed wireless lighting components - for greater efficiency and control of your entire wireless lighting system.

### LUMINAIRE CONTROLLER

Easily installed modules that can turn on, turn off, or provide 0-10V dimming. Available as a fixture insert or, for low-profile appliances, as an attachment to the junction box.



Reliably adjusts brightness to harvest maximum daylight without wiring.

Engineered to provide maintenance-free life.



Remote, Wall-Mount and Scene switches have touch screens and can wirelessly dim or turn lights on and off.

Engineered to provide maintenance-free life.

### **POWER**

Audacy by IDEAL is fundamentally about controlling your powered environment more efficiently. Our Plug Load Controller is easy to install and manage, making "vampire" power drain a thing of the past.



Drastically reduce power waste associated with idle electric appliances. Installs easily in either new construction or renovation environments.

### IT'S AS EASY AS 1, 2, 3...





1 SET UP INFRASTRUCTURE

GATEWAY

2 TIE IN LIGHTS

LUMINAIRE CONTROLLERS

#### EASY SET UP

First, connect a Gateway to the Audacy™ Interface. Then, install Luminaire Controllers into existing fixtures. Add switches, sensors and plug load controllers. You are now ready to manage and control your lighting environment.

#### **EASY INSTALLATION**

Engaging lights and light groupings is fast and cost-effective with Audacy Luminaire Controllers – streamlined plug-and-play modules that quickly tie every fixture into your system. On average, a Luminaire





3 ADD DEVICES

> SENSORS, SWITCHES AND PLUG LOAD CONTROLLERS

4 CONFIGURE AND CONTROL

**USER INTERFACE** 

Controller can be installed in less than 3 minutes. With electronics engineered for maintenance-free operation, switches, sensors and plug load controllers are easy to install almost anywhere.

#### **EASY CONTROL**

Schedule and modulate your light preferences with superior ease via the Audacy™ system's simple online Interface. With Audacy, you're at the helm of the most intuitive wireless controls system available.



#### **GATEWAY**

#### GW-1100

Each Gateway is the primary processing hub of the Audacy™ Wireless Controls system, providing 24/7 back-and-forth communication between your Audacy Interface and onsite lighting environments.

#### HOW IT WORKS

Hardwired and mounted to any wall, the Gateway wirelessly relays scheduled lighting inputs – as established via your Audacy Interface – to any light fixture equipped with an Audacy Luminaire Controller.

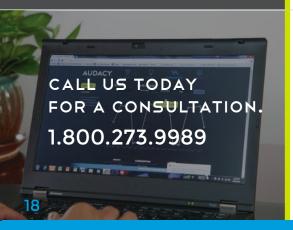
#### **AS YOU COMMAND**

In this way, the Gateway communicates with up to 250 system-enabled fixtures to ensure selected lights turn on, turn off or dim where and when you desire.

#### KNOW MORE, SPEND LESS

Likewise, each Gateway device wirelessly receives and prioritizes inputs from onsite sensors, switches and Building Automation Systems. Information such as sensor data, fixture status, user overrides and energy usage is then relayed back to your Audacy Interface where it is available for your periodic review.

The Audacy Gateway allows you to easily understand, via the online Interface, evolving light usage patterns. From there, it's easy to adjust and maximize your system and your energy efficiency over time.



#### AUDACY BY IDEAL®: CUTTING COSTS. CUTTING EDGE.

IDEAL has been a leading manufacturer of quality electrical appliances for over one hundred years. Crafted at the intersection of simple and innovative, our new Audacy Wireless Controls system represents a streamlined future state of building technology for today's commercial and industrial use.

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#### PLUG LOAD CONTROLLER

#### RS-1800

The Audacy™ Plug Load Controller is an AC-powered wireless receptacle control device, part of the Audacy Wireless Controls system. With it, you can wirelessly turn on or off your wall outlets – preventing items like coffee makers, task lighting, monitors or even personal fans and heaters from adding to your electric bill during off hours.

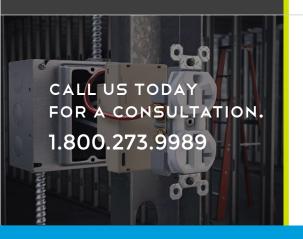
#### HOW IT WORKS

Connected wirelessly to a local Audacy Motion Sensor or simply scheduled to turn on or off via inputs to your Audacy Interface, the outlets controlled by Plug Load Controllers will not consume electricity when a room is vacant.

#### SIMPLE INSTALLATION. EASY COMPLIANCE.

Operating in the highly reliable 915 MHz spectrum, the Audacy Plug Load Controller is designed to install quickly – minimizing installation time. Each device allows you to control individual receptacles as desired.

The Audacy Plug Load Controller helps you comply with ASHRAE 90.1-2010 and CA Title 24 requirements.



SWITCHED

#### AUDACY BY IDEAL®: CUTTING COSTS. CUTTING EDGE.







## LUMINAIRE CONTROLLER, INTERNAL-MOUNT

#### **SCL-1000**

The primary components of the Audacy™ Wireless Controls system; these easily-installed modules can turn on, turn off, or provide 0-10V dimming.

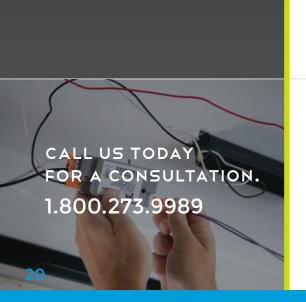
#### HOW IT WORKS

AC-powered Audacy Luminaire Controllers operate in the highly reliable 915 MHz spectrum. Each uses convenient push-in wire termination for quick and easy installation.

#### **BECAUSE TIME IS MONEY**

Your electrical installer simply opens the fixture, cuts the wire and clips in the Luminaire Controller. Installation time for each fixture can be as little as three minutes. A typical wired system is vastly more labor intensive and costly to install.

The Audacy Luminaire Controllers get your system up and operational faster and can be modified over time with incredible ease. Luminaire Controllers transmit up to 300 feet to the Gateway and with the repeater mode enabled, the range is extended even farther.



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## LUMINAIRE CONTROLLER, EXTERNAL-MOUNT

#### **SCD-1000**

This junction box insert for low profile appliances is a primary component of the Audacy™ Wireless Controls system. These easily-installed modules can turn on, turn off, or provide 0-10V dimming.

#### HOW IT WORKS

AC-powered Audacy Luminaire Controllers operate in the highly reliable 915 MHz spectrum. Each uses convenient push-in wire termination for quick and easy installation.

#### **BECAUSE TIME IS MONEY**

When a fixture cannot accommodate an internal-mounted Luminaire Controller, an external-mounted version can be used instead. Your electrical installer mounts this Luminaire Controller to a junction box through a knockout, and the wiring is done inside the box. A typical wired system is vastly more labor intensive and costly to install.

The Audacy Luminaire Controllers get your system up and operational faster and can be modified over time with incredible ease. Luminaire Controllers transmit 300 feet to the Gateway and with the repeater mode enabled, the range is extended even farther.

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#### REMOTE SWITCH

**SS-1200** 

Using our exclusive maintenance-free technology, the Audacy™ Remote Switch wirelessly controls light fixtures equipped with Audacy Luminaire Controllers, providing onsite control of your system-enabled light fixtures or groupings.

#### SIMPLICITY IS THE RULE

The Audacy Remote Switch is wireless and simple to install anywhere or use as a handheld switch for remote convenience. The innovative, capacitive touch panel will adjust to your desired setting at the touch of a finger. The Audacy Remote Switch operates in the highly reliable 915 MHz spectrum.

#### ADAPTABILITY AT YOUR FINGERTIPS

Used in conjunction with the Audacy Wireless Controls system, the Remote Switch permits onsite employees to customize their lighting environments by overriding the master inputs of your Audacy Interface. The Remote Switch turns lights on or off and enables 0-10V dimming.

#### **BECAUSE TIME IS MONEY**

As with all Audacy Wireless Controls system components, the Audacy Remote Switch vastly reduces installation time and costs versus a typical wired system alternative. And you have the flexibility to place it anywhere you choose because there are no wires to run.



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#### WALL-MOUNT SWITCH

WM5-1200

Replacing a hard-wired light switch, the Audacy™ Wall-Mount Switch controls light fixtures equipped with Audacy Luminaire Controllers, providing onsite control of your system-enabled light fixtures or groupings.



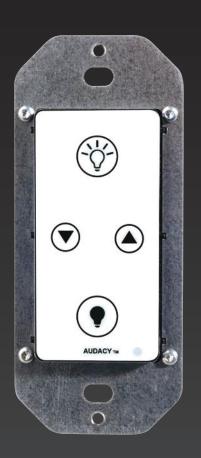
Simple to install in any switch box, the Audacy Wall-Mount Switch operates in the highly reliable 915 MHz spectrum.

#### ADAPTABILITY AT YOUR FINGERTIPS

Used in conjunction with the Audacy Wireless Controls system, the Wall-Mount Switch permits onsite employees to customize their lighting environments by overriding the master inputs of your Audacy Interface. The Wall-Mount Switch turns lights on or off and enables 0-10V dimming.

#### **BECAUSE TIME IS MONEY**

As with all Audacy Wireless Controls system components, the Audacy Wall-Mount Switch vastly reduces installation time and costs versus a typical wired system alternative. And you have the flexibility to place it anywhere you choose because there are no wires to run.



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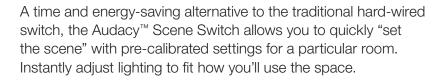
#### AUDACY BY IDEAL®: CUTTING COSTS. CUTTING EDGE.





#### **SCENE SWITCH**

WSS-1200



For example, in conference rooms, a Presentation setting can dim lights for crisper image projection, whereas a Work setting might maximize lighting for detailed review of documents and other materials.

#### MORE CONTROL. LESS FUSS.

The Audacy Scene Switch permits onsite employees to instantly adjust their lighting environment to the purpose at hand with up to 4 preset settings.

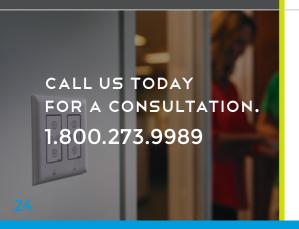
#### **DOUBLE EDGED EFFICIENCY**

Operating in the highly reliable 915 MHz spectrum, our Scene Switch is wireless and easy to install anywhere in the room. It delivers the exact light levels needed at any given time while saving time and money.

#### **BECAUSE TIME IS MONEY**

As with all Audacy Wireless Controls system components, the Audacy Scene Switch vastly reduces installation time and costs versus a typical wired system alternative. And you have the flexibility to place it anywhere you choose because there are no wires to run.





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#### LIGHT SENSOR

#### LS-1400

Using our exclusive maintenance-free technology, the  $Audacy^{\mathsf{TM}}$  Light Sensors wirelessly adjusts brightness to harvest maximum daylight.

#### HOW IT WORKS

Put simply, the Audacy Light Sensors detect ambient light in a designated space and send measurements to your Audacy Gateway.

#### EVERYTHING'S UNDER CONTROL

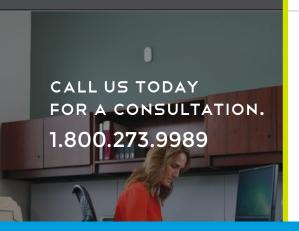
Your inputs to the Audacy Interface inform a system that determines which groups of light fixtures – equipped with Audacy Luminaire Controllers – dim or brighten based on ambient light throughout the day.

#### SIMPLICITY IS THE RULE

Wireless and simple to install almost anywhere, Audacy Light Sensors operate in the highly reliable 915 MHz spectrum. Light Sensors easily help facilitate compliance with the newest ASHRAE requirements.

#### **BECAUSE TIME IS MONEY**

As with all Audacy Wireless Controls system components, the Audacy Light Sensors vastly reduce installation time and costs versus a typical wired system alternative. You even have the flexibility to place it anywhere you choose, because there are no wires to run.



#### AUDACY BY IDEAL®: CUTTING COSTS. CUTTING EDGE.







#### CEILING-MOUNT MOTION SENSOR

#### **VSC-1300**

Using our exclusive maintenance-free technology, the Audacy™ Motion Sensors wirelessly detect occupancy and/or vacancy to adjust lighting based on preferences programmed into your Audacy Interface.

#### HOW IT WORKS

The Audacy Ceiling-Mount Motion Sensors detect movement via sensitive infrared technology and then relay commands – based on intervals of absence or activity – to system-enabled fixtures.

Operating in the highly reliable 915 MHz spectrum, the Ceiling-Mount versions of the Audacy Motion Sensors require no wiring and can be placed anywhere.

#### PEOPLE MOVE. LIGHT SHOULD TOO.

Your inputs to the Audacy Interface inform the system that determines which groups of light fixtures – equipped with Audacy Luminaire Controllers – can turn off/on, dim or brighten based on employee migration throughout the day.

#### **BECAUSE TIME IS MONEY**

As with all Audacy Wireless Controls system components, Audacy Ceiling-Mount Motion Sensors vastly reduce installation time and costs versus typical wired system alternatives. And you have absolute flexibility in placement because there are no wires to run.



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#### AUDACY BY IDEAL®: CUTTING COSTS. CUTTING EDGE.





#### WALL-MOUNT MOTION SENSOR

#### **VSW-1300**

Using our exclusive maintenance-free technology, the Audacy™ Motion Sensors wirelessly detect occupancy and/or vacancy to adjust lighting based on preferences programmed into your Audacy Interface.

#### HOW IT WORKS

The Audacy Wall-Mount Motion Sensors detect movement via sensitive infrared technology and then relay commands – based on intervals of absence or activity – to system-enabled fixtures.

Operating in the highly reliable 915 MHz spectrum, the Wall-Mount versions of the Audacy Motion Sensors requires no wiring and can be placed anywhere.

#### PEOPLE MOVE. LIGHT SHOULD TOO.

Your inputs to the Audacy Interface inform the system that determines which groups of light fixtures – equipped with Audacy Luminaire Controllers – can turn off/on, dim or brighten based on employee migration throughout the day.

#### **BECAUSE TIME IS MONEY**

As with all Audacy Wireless Controls system components, Audacy Wall-Mount Motion Sensors vastly reduce installation time and costs versus typical wired system alternatives. And you have absolute flexibility in placement because there are no wires to run.

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#### AUDACY BY IDEAL®: CUTTING COSTS. CUTTING EDGE.







The GW-1100 Wireless Gateway by IDEAL® is an electronic communications device which acts as the central processing "hub" of the Audacy™ system. The GW-1100 wirelessly receives and prioritizes inputs from sensors, switches and/or the Audacy Interface (e.g., website or app). It then communicates wirelessly with each Luminaire Controller to turn on, turn off or dim light fixtures, or control plug loads based on input from the systems above. The GW-1100 can also pass information such as light fixture status, sensor data, and energy usage to the Audacy Interface.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION	
Radio Frequency Range	902-928 MHz, Dual External Antennas	
Wireless Protocol	Proprietary based on IEEE 802.15.4	
Encryption	Proprietary based on AES encryption	
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXGW1100B IC: 11250A-GW1100B	
Transmit Power	10 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum	
Transmit Range	300 ft. (91.4m) indoors to an Audacy™ Luminaire Controller in a typical commercial building; extended range when repeater mode enabled	
Repeater Mode	Enabled via Audacy Interface or Gateway	
Input Voltage	24V AC/DC, removable terminal block	
Configuration/Network Port	Ethernet	
Operating Temperature	50°F to 90°F (10°C to 32°C)	
Storage Temperature	-4°F to 122°F (-20°C to 50°C)	
Installation Environment	Indoor use only	
Mounting	2 mounting holes—vertical (wall-mount) or horizontal	
Enclosure	Sheet Metal, UL 2043 plenum rated	
Color	Black	
Dimensions	8.5" x 5.3" x 1.8", excluding antennas (215.9mm x 134.6mm x 45.7mm)	
Weight	16.2 oz (459g)	
Warranty	3 year	

Catalog Number	59-GW1100-	59-GW1100-	59-GW1100-	59-GW1100-	59-GW1100-	59-GW1100-	59-GW1100-
	ETHER	BACIP	BACMS	MODIC	MODRT	LON	META
Description	Standalone (i.e., no BAS)	BACNet® IP	BACNet® MSTP	Modbus TCP	Modbus RTU	LonWorks®	Metasys® N2

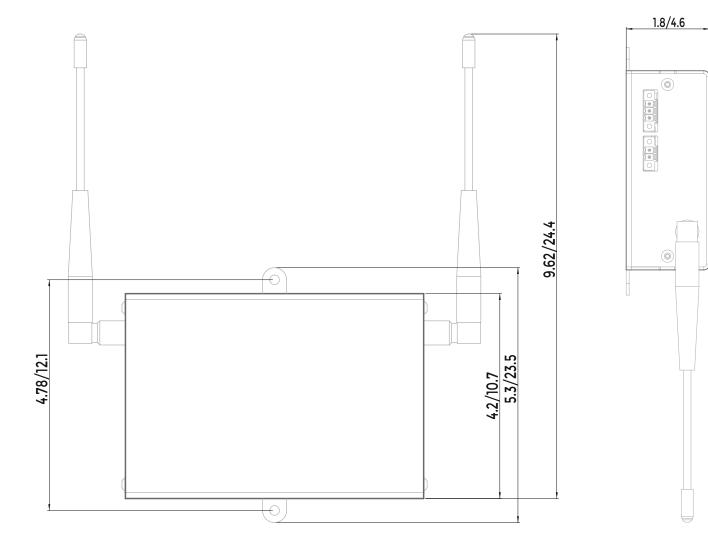
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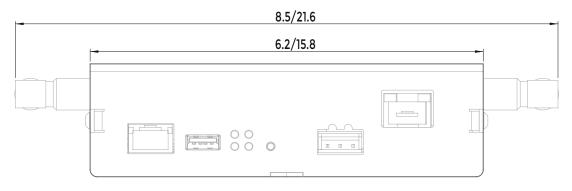






#### MECHANICAL DIMENSIONS (INCHES/CM)











The RS-1800 Plug Load Controller by IDEAL® is an AC-powered wireless receptacle control device that is part of the Audacy™ Wireless Controls system. Operating in the highly reliable 915 MHz spectrum, the RS-1800 is an in-junction box module that can turn on or off AC line voltage to a receptacle. The RS-1800 quickly and easily installs inside a junction box and provides the ability to control individual receptacles if desired. The RS-1800 and Audacy Wireless Controls system can be used to help provide compliance with ASHRAE 90.1-2010 and CA Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION
Radio Frequency Range	902-928 MHz, Integrated Wire Antenna
Wireless Protocol	Proprietary based on IEEE 802.15.4
Encryption	Proprietary based on AES encryption
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXRS1800 IC: 11250A-RS1800 UL 916 (Energy Management Equipment) CSA/C22.2 No. 205-12 (Signal Equipment)
Transmit Power	18 dBm short duration, utilizing advanced spread spectrum technology
Transmit Range	100 ft. (30.5m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled
Input Voltage	120V
Rated Load	20A, 1HP
Rated Load Wattage	2400W@120V
Operating Temperature	50°F to 158°F (10°C to 70°C)
Installation Environment	Indoor use only
Connections	12 AWG stranded pigtails (line, neutral, switched)
Color	Gray
Dimensions	2.84" x 1.65" x 1.03" (72.13mm x 41.91mm x 26.12mm)
Weight	3.7 oz (104.9g)
Warranty	3 year

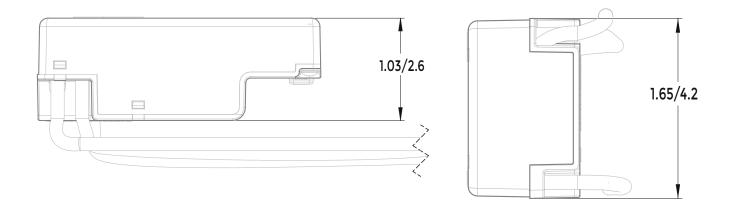
Catalog Number	59-RS1800
Description	Audacy™ Plug Load Controller

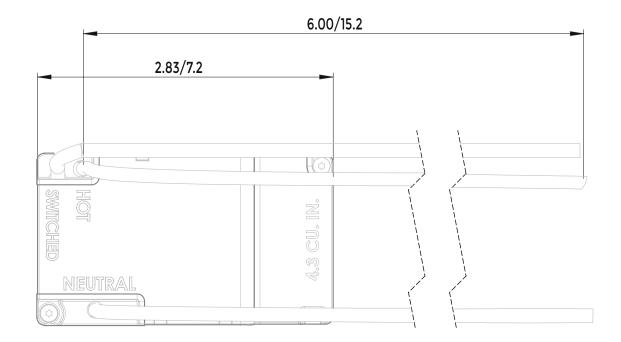






#### MECHANICAL DIMENSIONS (INCHES/CM)









**SCL-1000** 

The SCL-1000 internal-mounted Luminaire Controller by IDEAL® is an AC-powered wireless lighting control device that is part of the Audacy™ Wireless Controls system. Operating in the highly reliable 915 MHz spectrum, the SCL-1000 is an in-fixture module that can turn on, turn off, or provide a 0-10V dimming signal to an electronic dimming ballast or LED driver. Using push-in wire termination, the SCL-1000 quickly and easily installs inside a light fixture and provides the ability to control individual fixtures or groups of fixtures if desired. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and CA Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION	
Radio Frequency Range	902-928 MHz, Integrated Wire Antenna	
Wireless Protocol	Proprietary based on IEEE 802.15.4	
Encryption	Proprietary based on AES encryption	
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXSCL1000 IC: 11250A-SCL1000 UL916 (Energy Management Equipment), UL2459 (Luminaire Disconnect)	
Transmit Power	18 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum	
Transmit Range	300 ft. (91.4m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled	
Input Voltage	SCL: 120V/240V/277V; SCC: 347V; ESC: 24VDC	
Rated Current	SCL: 5A; SCC: 3A; ESC: 4.1A	
Rated Load Wattage	SCL: 600W@120V; 1200W@240V; 1385W@277V; SCC: 1041W@347V; ESC: 100W@24VDC	
Operating Temperature	10°C to 70°C (50°F to 158°F)	
Installation Environment	Indoor use only	
Mounting	UL-Listed adhesive backing (no screws required)	
Color	Gray	
Dimensions	4.67" x 1.75" x 3.94", antenna fully extended (118.6mm x 44.5mm x 100.1mm)	
Weight	3.3 oz (93.6g)	
Warranty	3 year	

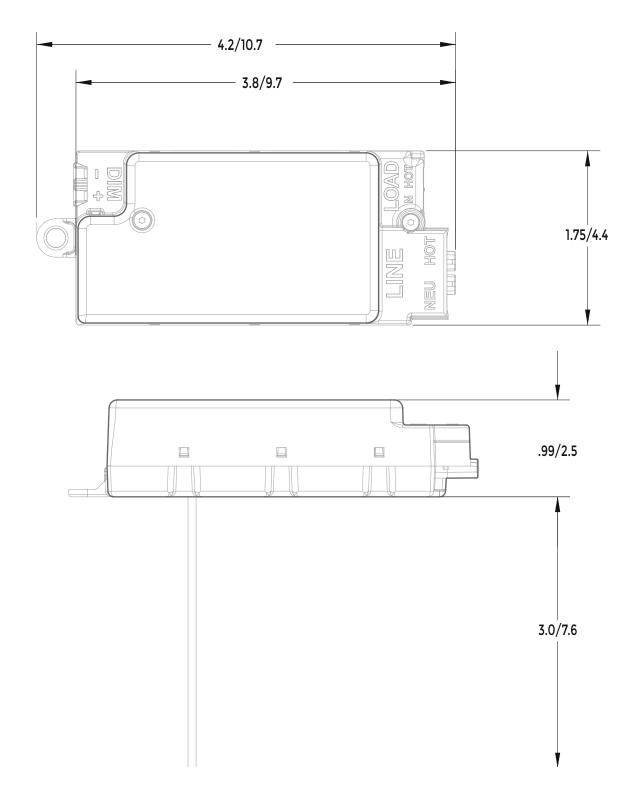
Catalog Number	59-SCL1000	59-SCC1000	59-ESC1000
Description	Luminaire Controller, Internal-Mount	347V Luminaire Controller, Internal-Mount	LVDC Luminaire Controller, Internal- Mount







#### MECHANICAL DIMENSIONS (INCHES/CM)





**SCD-1000** 

The SCD-1000 external-mounted Luminaire Controller by IDEAL® is an AC-powered, wireless lighting control device that is part of the Audacy™ Wireless Controls system. Operating in the highly reliable 915 MHz spectrum, the SCD-1000 is a junction box insert module that can turn on, turn off or provide a 0-10V dimming signal to an electronic dimming ballast or LED driver. The SCD-1000 quickly and easily installs using a knockout on a junction box or fixture and provides the ability to control individual fixtures or groups of fixtures if desired. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and CA Title 24 requirements.



#### SPECIFIC ATIONS

ITEM	DESCRIPTION
Radio Frequency Range	902-928 MHz, Integrated Wire Antenna
Wireless Protocol	Proprietary based on IEEE 802.15.4
Encryption	Proprietary based on AES encryption
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXSCD1000 IC: 11250A-SCD1000 UL 916 (Energy Management Equipment), UL 94 5VA Rating
Transmit Power	18 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum
Transmit Range	300 ft. (91.4m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled
Input Voltage	SCD: 120V/240V/277V AC; ESCD: 24VDC
Rated Current	SCD: 5A; ESCD: 4.1A
Rated Load Wattage	SCD: 600W@120V; 1200W@240V; 1385W@277V ESCD: 100W@24VDC
Operating Temperature	10°C to 70°C (50°F to 158°F)
Installation Environment	Indoor use only
Mounting	Directly to junction box or fixture via 1/2" knockout
Dimming Wire Placement	Within nipple for internal connection
Color	Black
Dimensions	2.74" x 2.42" x 4.2", antenna fully extended (69.6mm x 61.5mm x 106.7mm)
Weight	4.6 oz (130.4g)
Warranty	3 year

Catalog Number	59-SCD1000	59-ESCD1000
Description	Luminaire Controller, External-Mount	LVDC Luminaire Controller, External Mount

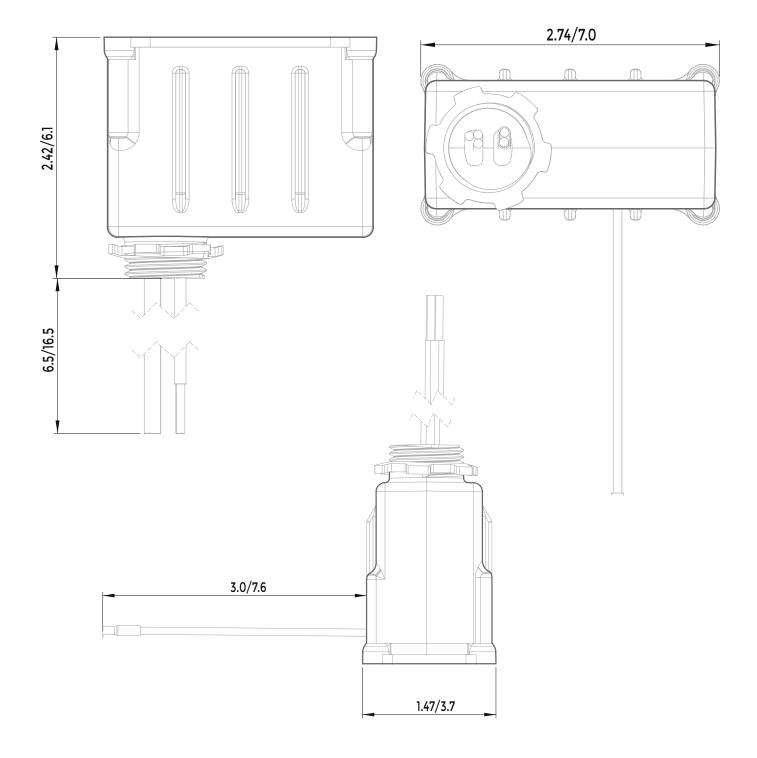
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#### MECHANICAL DIMENSIONS (INCHES/CM)







The SS-1200 Remote Switch by IDEAL® is a battery-powered, wireless light switch that is part of the Audacy™ Wireless Controls system. Operating in the highly reliable 915 MHz spectrum, the SS-1200 requires no wiring, has a 25-year battery life, and wirelessly sends commands to control light fixtures equipped with Audacy Luminaire Controllers. Since it is not hard-wired, the SS-1200 can be mounted or placed virtually anywhere a switch is desired. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and California Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION
Radio Frequency Range	902-928 MHz, Internal Antenna
Wireless Protocol	Proprietary based on IEEE 802.15.4
Encryption	Proprietary based on AES encryption
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXSS1200 IC: 11250A-SS1200
Transmit Power	2 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum
Transmit Range	100 ft. (30.5m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled
Power	25+ year Li battery, non-replaceable
Operating Temperature	10°C to 32°C (50°F to 90°F)
Light Level	0-2500 lux (0-232 fc)
Installation Environment	Indoor use only
Mounting	2 bracket mounting holes (See mechanical drawing for dimensions)
Color	White
Dimensions	4.56" x 2.29" x 0.95" (115.82mm x 58.17mm x 24.13mm)
Weight	3.0 oz (85g)
Warranty	3 year

Catalog Number	59-SS1200
Description	Audacy™ Remote Switch

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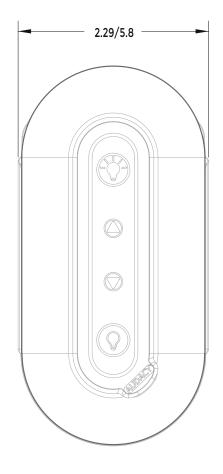
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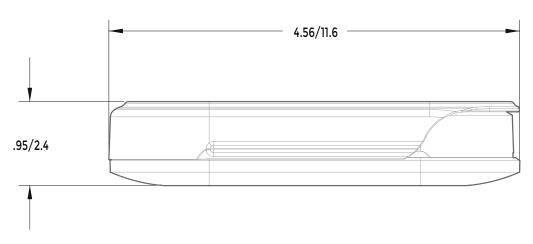






#### MECHANICAL DIMENSIONS (INCHES/CM)









The WMS-1200 Wall-Mount Switch by IDEAL® is a battery powered, wireless light switch that is part of the Audacy™ Wireless Controls system. Operating in the highly reliable 915 MHz spectrum, the WMS-1200 is a wall-mounted switch that fits into a decorator-style faceplate and can be used to replace an existing switch. The WMS-1200 requires no wiring, has a 25-year battery life and wirelessly sends commands to control light fixtures equipped with Audacy Luminaire Controllers. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and CA Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION	
Radio Frequency Range	902-928 MHz, Internal Antenna	
Wireless Protocol	Proprietary based on IEEE 802.15.4	
Encryption	Proprietary based on AES encryption	
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXWMS1200 IC: 11250A-WMS1200	
Transmit Power	2 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum	
Transmit Range	100 ft. (30.5m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled	
Power	25+ year Li battery, non-replaceable	
Operating Temperature	10°C to 32°C (50°F to 90°F)	
Installation Environment	Indoor use only	
Mounting	In switch box, decorator-style faceplate	
Color	White	
Dimensions	4.14" x 1.75" x 0.76" (69.6mm x 61.5mm x 106.7mm)	
Weight	3.0 oz (85g)	
Warranty	3 year	

Catalog Number	59-WMS1200
Description	Audacy™ Wall-Mount Switch

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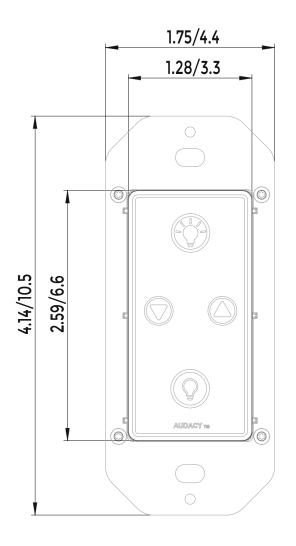
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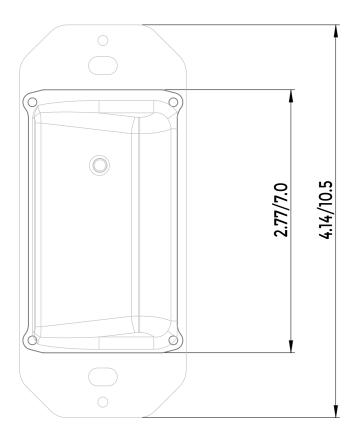


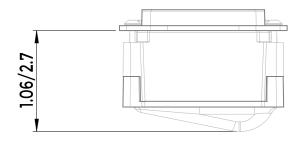




#### MECHANICAL DIMENSIONS (INCHES/CM)











The WSS-1200 Scene Switch by IDEAL® is a battery-powered, wireless light switch that is part of the Audacy™ Wireless Controls system. Operating in the highly reliable 915 MHz spectrum, the WSS-1200 is a wall-mounted switch that fits into a decorator-style faceplate and can be used to replace an existing switch. This switch offers up to 4 preset settings for complete environment control. The WSS-1200 requires no wiring, has a 25-year battery life and wirelessly sends commands to control light fixtures equipped with Audacy Luminaire Controllers. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and CA Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION	
Preconfigured Scenes	Up to 4	
Radio Frequency Range	902-928 MHz, Internal Antenna	
Wireless Protocol	Proprietary based on IEEE 802.15.4	
Encryption	Proprietary based on AES encryption	
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXWSS1200 IC: 11250A-WSS1200	
Transmit Power	2 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum	
Transmit Range	100 ft. (30.5m) indoors to an Audacy™ Gateway or Luminaire Controllers in a typical commercial building; extended range when repeater mode enabled	
Power	25+ year Li battery, non-replaceable	
Operating Temperature	50°F to 90°F (10°C to 32°C)	
Installation Environment	Indoor use only	
Mounting	In switch box, decorator-style faceplate	
Color	White	
Dimensions	4.14" x 1.75" x 0.76" (69.6mm x 61.5mm x 106.7mm)	
Weight	3.0 oz (85g)	
Warranty	3 year	

Catalog Number	59-WSS1200
Description	Audacy™ Scene Switch

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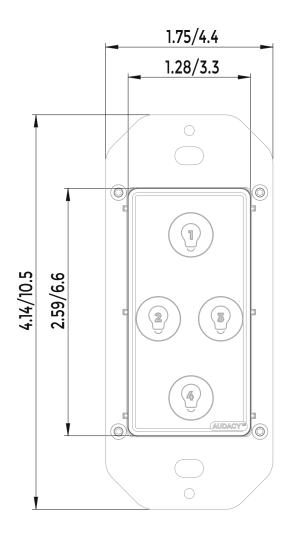
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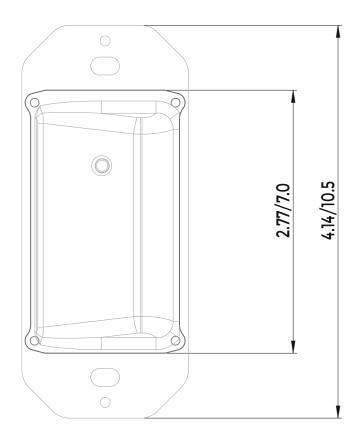


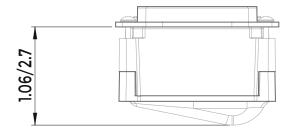




#### MECHANICAL DIMENSIONS (INCHES/CM)











The LS-1400 Light Sensor by IDEAL® is a battery-powered, wireless light sensor that is part of the Audacy™ Wireless Controls system. The LS-1400 is used to detect ambient light in a space, providing daylight harvesting capabilities. Operating in the highly reliable 915 MHz spectrum, the LS-1400 requires no wiring, has a 25-year battery life, and wirelessly sends ambient light measurements to the Audacy Wireless Gateway for closed-loop daylight harvesting operation. Since it is not hard-wired, the LS-1400 can mount virtually anywhere a light sensor is desired. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and California Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION		
Radio Frequency Range	902-928 MHz, Internal Antenna		
Wireless Protocol	Proprietary based on IEEE 802.15.4		
Encryption	Proprietary based on AES encryption		
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXLS1400 IC: 11250A-LS1400		
Transmit Power	2 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum		
Transmit Range	100 ft. (30.5m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled		
Power	25+ year Li battery, non-replaceable		
Operating Temperature	10°C to 32°C (50°F to 90°F)		
Light Level	0-2500 lux (0-232 fc)		
Installation Environment	Indoor use only		
Mounting	2 bracket mounting holes (See mechanical drawing for dimensions)		
Color	White		
Dimensions	4.56" x 2.29" x 1.12" (115.82mm x 58.17mm x 28.45mm)		
Weight	3.0 oz (85g)		
Warranty	3 year		

Catalog Number	59-LS1400
Description	Audacy™ Light Sensor

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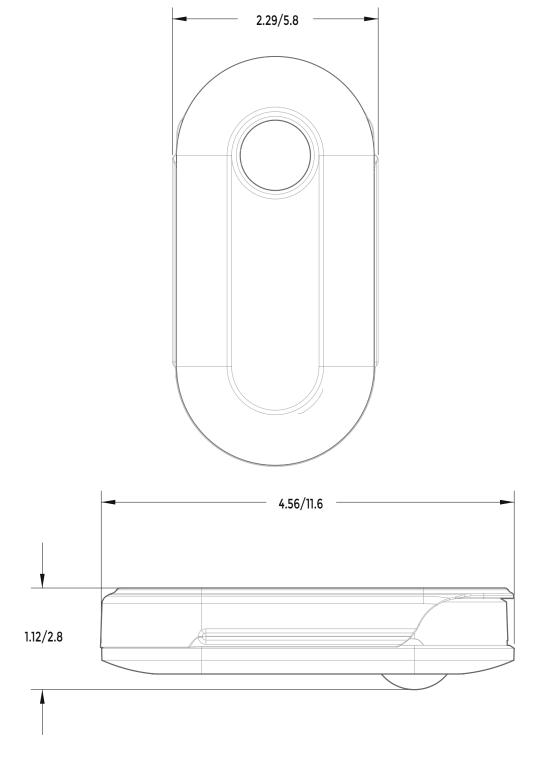
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#### MECHANICAL DIMENSIONS (INCHES/CM)







**VSC-1300** 

The VSC-1300 Ceiling-Mount Motion Sensor by IDEAL® is a battery-powered, passive infrared motion sensor that is part of the Audacy™ Wireless Controls system. It can be used to detect occupancy and/or vacancy, and turn on, turn off or dim lights based on preferences. Operating in the highly reliable 915 MHz spectrum, the VSC-1300 requires no wiring, has a 25-year battery life, and wirelessly sends commands to control light fixtures equipped with Audacy Luminaire Controllers. Since it is not hard-wired, the VSC-1300 can mount virtually anywhere a motion sensor is desired, for convenience or coverage. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and California Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION		
Radio Frequency Range	902-928 MHz, Internal Antenna		
Wireless Protocol	Proprietary based on IEEE 802.15.4		
Encryption	Proprietary based on AES encryption		
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXVSC1300 IC: 11250A-VSC1300		
Transmit Power	2 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum		
Transmit Range	100 ft. (30.5m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled		
Power	25+ year Li battery, non-replaceable		
Operating Temperature	10°C to 32°C (50°F to 90°F)		
Sensor Technology	Passive Infrared		
Installation Environment	Indoor use only		
Mounting	2 bracket mounting holes (See mechanical drawing for dimensions)		
Color	White		
Dimensions	4.56" x 2.29" x 0.95" (115.82mm x 58.17mm x 24.13mm)		
Weight	3.0 oz (85g)		
Warranty	3 year		

Catalog Number	59-VSC1300
Description	Audacy™ Ceiling-Mount Motion Sensor

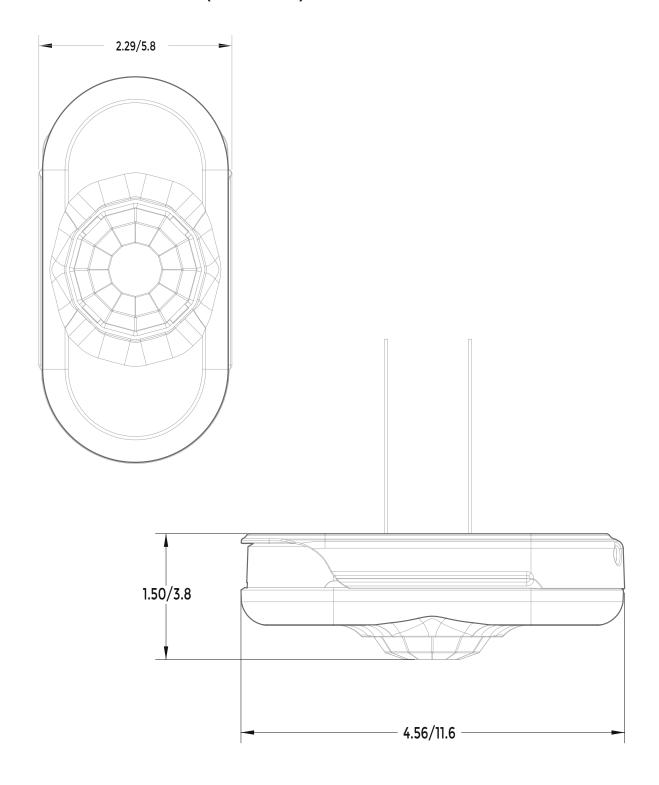
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#### MECHANICAL DIMENSIONS (INCHES/CM)







**VSW-1300** 

The VSW-1300 Wall-Mount Motion Sensor by IDEAL® is a battery-powered, wall-mounted, passive infrared motion sensor that is part of the Audacy™ Wireless Controls system. It can be used to detect occupancy and/or vacancy, and turn on, turn off or dim lights based on preferences. Operating in the highly reliable 915 MHz spectrum, the VSW-1300 requires no wiring, has a 25-year battery life, and wirelessly sends commands to control light fixtures equipped with Audacy Luminaire Controllers. Since it is not hard-wired, the VSW-1300 can mount virtually anywhere a motion sensor is desired, for convenience or coverage. The Audacy Wireless Controls system can be used to provide compliance with ASHRAE 90.1-2010 and California Title 24 requirements.



#### **SPECIFICATIONS**

ITEM	DESCRIPTION		
Radio Frequency Range	902-928 MHz, Internal Antenna		
Wireless Protocol	Proprietary based on IEEE 802.15.4		
Encryption	Proprietary based on AES encryption		
Regulatory Approvals	FCC Part 15 and Industry Canada FCC ID: 2AAMXVSW1300 IC: 11250A-VSW1300		
Transmit Power	2 dBm short duration, utilizing both frequency hopping and direct sequence spread spectrum		
Transmit Range	100 ft. (30.5m) indoors to an Audacy™ Gateway or Luminaire Controller in a typical commercial building; extended range when repeater mode enabled		
Power	25+ year Li battery, non-replaceable		
Operating Temperature	10°C to 32°C (50°F to 90°F)		
Sensor Technology	Passive Infrared		
Installation Environment	Indoor use only		
Mounting	2 bracket mounting holes (See mechanical drawing for dimensions)		
Color	White		
Dimensions	4.55" x 2.29" x 1.67" (115.82mm x 58.17mm x 24.42mm)		
Weight	3.0 oz (85g)		
Warranty	3 year		

Catalog Number	59-VSW1300
Description	Audacy™ Wall-Mount Motion Sensor

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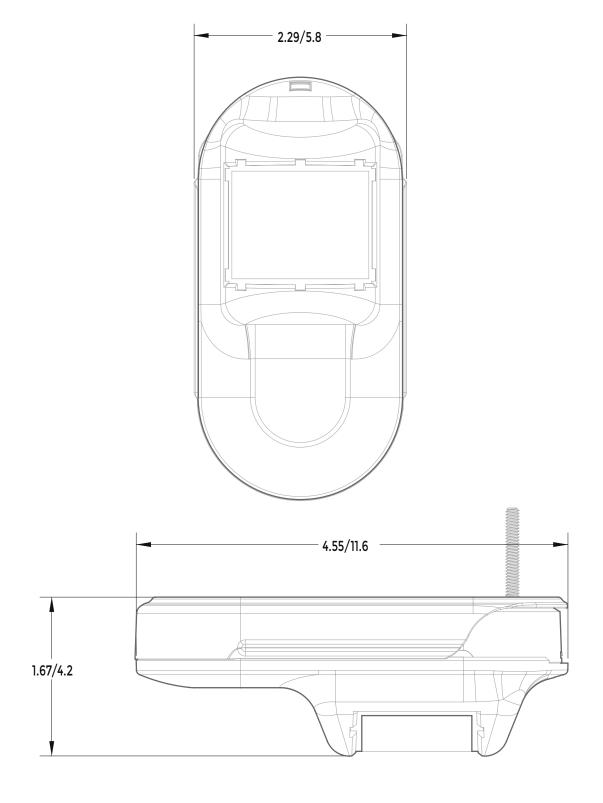
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#### MECHANICAL DIMENSIONS (INCHES/CM)



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#### SIMPLIFY YOUR LIGHTING

On average, lighting accounts for 40% of building operation costs in most workplaces. The new Audacy<sup>®</sup> Wireless Controls system by IDEAL<sup>®</sup> gives you more control over your lighting environment while saving up to 50% on your corporate lighting costs.

#### ANTICIPATING THE FUTURE

The Audacy Wireless Controls system focuses on efficiency in all its forms. Faster and easier to install, you save time and costs associated with build-out and renovation. And our streamlined wireless system allows you to better control your powered environment while advanced smart components minimize energy and lighting costs over time.

#### CONTROL EVERYTHING. SWEAT NOTHING.

The Audacy Interface is the brains of your operation. Uncomplicated and easy to program or adjust over time, it allows you to schedule power to your building hardware and systems or to affect change in real time.

Leading the competition, the Audacy Wireless Controls system brings together technologies that anticipate your future. Enabled for Apple® devices, we integrate easily with your existing Building Automation System and provide 24/7 back-and-forth communication between you and your powered environment.

#### **GET AHEAD OF YOUR GOALS**

In short, the Audacy Wireless Controls system delivers eco-friendly technologies that save you money - on the road to fulfilling the biggest priorities of the business and every business.

#### THE AUDACY® LINEUP

The entire Audacy system is sleek – With every component boasting unparalleled function and flexibility.





The primary control device; each Gateway coordinates fixtures and sensor components, in the manner that they were grouped together, and provides 24/7 communication with your Audacy Interface. Each Gateway is the "enforcer" for all of your program inputs.



#### LIGHTING



Ceiling and Wall-Mount devices that require no wiring and sense occupancy and/or vacancy. Motion sensors communicate with each Gateway to "alert" occupancy status, ultimately signaling Luminaire and Plug Load Controllers to turn off devices.

Engineered to provide maintenance-free life.





#### **LUMINAIRE CONTROLLERS**

Easily installed modules that can turn on, turn off, or provide 0-10V dimming. Available as a fixture insert or, for low-profile appliances, as an attachment to the junction box.





#### **LIGHT SENSOR**

Reliably adjusts brightness to harvest maximum daylight without wiring.

Engineered to provide maintenance-free life.





#### **SWITCHES**

Remote, Wall-Mount and Scene switches have touch screens and can wirelessly dim or turn lights on and off.

Engineered to provide maintenance-free life.





#### **POWER**



#### **PLUG LOAD CONTROLLER**

Drastically reduce power waste associated with idle electric appliances. Installs easily in either new construction or renovation environments.





### MORE MANAGED. LESS MANAGEMENT.

The online Audacy<sup>®</sup> Interface is where it all begins and ends. Customizable and proprietary to your operation, it's easy to configure and adjust and is accessible from Apple<sup>®</sup> devices.

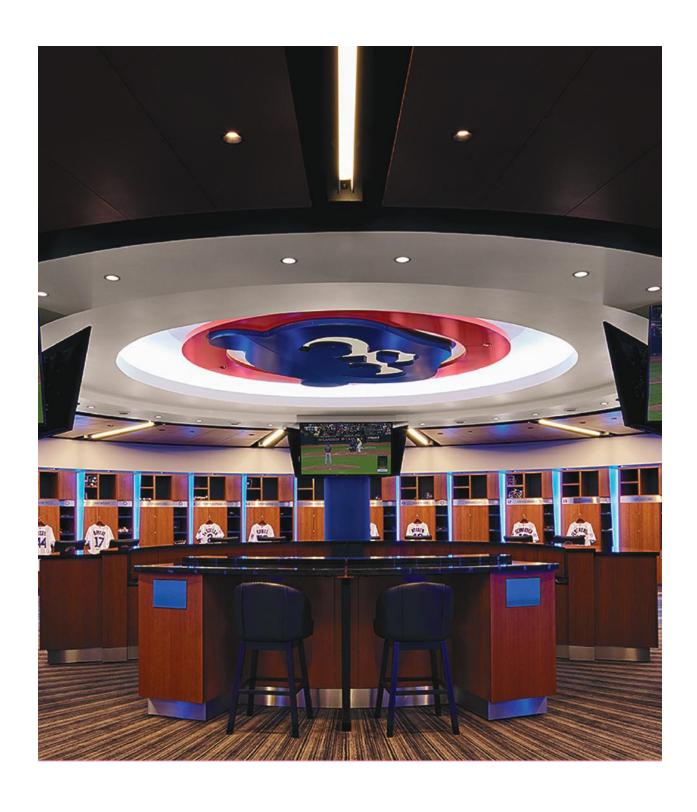
Intuitively organized around a framework of basic categories and simple inputs, the Audacy Interface enables management of every component installed as part of your overall system. Together, these components ensure 24/7 custom control of your environment.

Upload all your devices to the Audacy Interface via the mobile app during installation, and instantly begin creating schedules and establishing settings for your system. The Audacy Interface alerts your system with your schedule and setting preferences to achieve desired lighting throughout your facility.

## AUDACIOUS BE AUDACIOUS

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WRIGLEY FIELD CASE STUDY 2017



## AUDACY® SYSTEM INSTALLATION BRINGS ADVANCED LIGHTING CONTROL TO CUBS ORGANIZATION



#### PREFACE

The Audacy Wireless Lighting Controls system was first installed into a 30,000 sq. ft. area of the iconic Wrigley Field stadium as part of the Renovation and Expansion of Wrigley Field, also known as, the 1060 Project. The system was deployed in the Chicago Cubs' Clubhouse, which opened to the players on opening day April 11th, 2016 and has quickly become one of the most advanced clubhouses in baseball. The hero behind the 1060 project is Carl Rice, who is the Vice President for the Renovation and Expansion of Wrigley Field. Rice described it best when he said, "The 1060 project is a wonderful project. Our goal is to maintain the historic charm of Wrigley Field and implement various forms of technology to try to make sure we are modern and up to date."

Previously, the Clubhouse area was much smaller and had outdated lighting with no controls. This area was tremendously expanded and now houses many features unique to this installation. Some features include: the Cubs logo, which can change colors directly from the Audacy platform to be in tune with the mood of the players prior to or after a game, as well as a lit "W" directly outside of the Clubhouse that is illuminated following a Cubs win.

#### AT A GLANCE

BUILDING TYPE
Office Building & Stadium
Retrofit

LOCATION Chicago, IL

FIXTURES 3,429

PROJECT SCOPE

90 Light Sensors 490 Motion Sensors 14 Dual-Technology Sensors 784 Switches 36 Plug Load Controllers 883 Luminaire Controllers 14 Gateways

> COMMISSION DATE 2/19/2016





#### CONCLUSION

In the Clubhouse application, the Audacy Wireless Controls system provided substantial energy savings to spaces that had previously housed outdated lighting with no lighting controls. Players and employees are able to have more granular control over personal spaces that they are using every day. As Rice said, "The Audacy system has given us more flexibility even beyond what our original scope was for the project."

Audacy was also later installed in the newly constructed 125,000 sq ft., 6-floor office building for Cubs employees, which opened along with the new Cubs Plaza for the 2017 baseball season. The Audacy system was placed into every floor of the building, which includes the main lobby area with its unique constantly changing video board, an open office concept that fosters collaboration among employees, and several unique meeting spaces, several of which have extroardinary views of the city from the balconies and rooftops.

Upon completion of the Clubhouse, the Cubs organization extended the Audacy Wireless Lighting Controls system into their newly constructed office building for their employees that was completed at the beginning of the 2017 baseball season. Within the office building, the Cubs organization is able to utilize the system's capabilities of occupancy, vacancy, daylight harvesting, scene selection, and remote system control. With the Cubs organization's open office concept that fosters flexibility and growth of space, and the Audacy system's web-based technology, the result is an incredibly flexible solution that can grow with the Cubs organization as they expand with the 1060 Project.

"[Audacy is a] significant
leap forward in wireless
energy management control
technology. We're impressed
by both the system and
IDEAL Industries' engineering
and customer service team,
which has met every deadline
and challenge thrown their
way. Their product support
consistently exceeded every
other system we reviewed."

CARL RICE, Chicago Cubs
 Vice President of Wrigley Field
 Restoration and Expansion
 (1060 Project)

#### ABOUT AUDACY

Audacy is advanced wireless lighting control that changes your space. It's a system designed to be as future-proof as it is innovative, giving you the power to see your world in a better light. And it's all from IDEAL Industries, Inc., the family-owned, professionally-managed company that's been advancing industries and providing unparalleled customer service to the trades for more than 100 years.





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# AUDACIOUS

UCLA ATHLETICS CASE STUDY 2014



## THE GAME CHANGER: UCLA ATHLETICS AND AUDACY®



As one of the world's leading universities, UCLA is committed to environmental responsibility and sustainability. Part of that commitment is ensuring that all energy is used wisely.

With over 100 championship trophies to its credit, UCLA athletic teams have made the school the most decorated institution in the history of the NCAA. Supporting such an astounding track record of success takes world-class, state-of-the-art administration and academic facilities to provide the student-athletes with an environment conducive to learning, improving, and succeeding—both on and off the field.

Kevin Borg is UCLA's Assistant Athletic Director for facilities and project management. He is charged with driving maximum performance from each facility across the school's intercollegiate programs. Borg also is accountable for stewarding the budget needed to build and run each facility in an increasingly demanding economic and regulatory environment.

California's tough new Title 24 regulations demand that organizations with large-scale buildings, campuses and facilities networks prove they are reducing energy usage across their operations each year. The Energy Information Administration reports that lighting can be up to 40% of an organization's energy bill each year - a statistic that rings true with Borg. "So one of the first things we did was attack our lighting situation."

#### AT A GLANCE

BUILDING TYPE
Office Building Retrofit

LOCATION Los Angeles, CA

FIXTURES 132

#### PROJECT SCOPE

23 Motion Sensors 22 Switches 2 Gateways

COMMISSION DATE July 2014

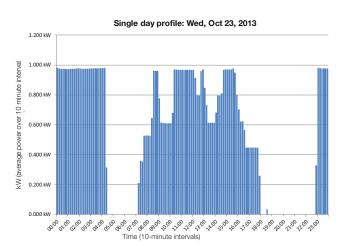
#### **PROJECT RESULTS**

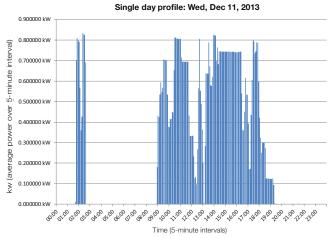
50% Savings in Offices 30% Savings in Learning Center



#### **BEFORE INSTALLATION: 2013**

#### **AFTER INSTALLATION: 2014**





#### **PROJECT RESULTS:**

50% savings in offices 30% savings in learning center

#### **RESULTS**

After easily retrofitting Audacy's wireless devices into existing light fixtures and infrastructure (under three minutes per fixture), UCLA used simple occupancy, vacancy, task tuning, and dimming approaches to achieve a 35% savings in their overall electrical lighting load. The Audacy system provides Borg and his facilities managers the ability to manage, monitor and adjust their organization's lighting system from a laptop, tablet or smart phone from anywhere in the world, even while they travel.

"First and foremost, the Audacy system allows us to provide our student-athletes with an environment conducive to learning. These simple controls reduce glare and provide the optimal light levels to help make our student-athletes comfortable," stated Borg.

Borg and his team also tested the Audacy system in the athletic department's learning center and in the Hall of Champions located in the Athletics' Hall of Fame. "The venues gave us a great way to evaluate the flexibility and responsiveness of the system in real world situations."

Over the 12-month test period, Borg and his team consistently delivered at least a 35 percent reduction in total energy usage "just by delivering the right amount of light to the right room at the right time." Borg explained, "The most efficient light is one that is off. So, we're now set up to automatically program lights to turn off when a room isn't being used." Borg said he can also monitor and adjust the lighting in each room from an iPad or smart phone.

"It's a game-changer," said Borg. "The Audacy system allows us to optimize both our lighting and energy usage from building to building. It's simple. Intuitive. Effective."

### INSTALLATION CAPABILITIES

Occupancy

Vacancy

**Dimming** 

Remote System Control

**Consumption Reporting** 





#### CONCLUSION

UCLA Athletics turned to IDEAL's Audacy Wireless Lighting Control system to help save energy in portions of the J.D. Morgan Center and Acosta Athletic Training Center facilities. Through simple, yet powerful lighting control strategies, UCLA was able to significantly reduce the amount of electricity used, helping them focus their energies on what is most important: their students.

**ABOUT AUDACY** 

Audacy is a wireless energy management system that provides occupancy, vacancy, scheduling, daylight harvesting, scene control, energy reporting, and Building Automation System integration to commercial, industrial, or retail applications. It also provides remote system control via an online interface or via the Audacy app from any location with an Internet connection.

"The ability to easily retrofit into existing fixtures was key in keeping the installation time down.[...]Using the right amount of light at the right time is key to our energy savings. Also, we're anticipating to see 30%-40% more life expectancy from the lamps since they're not 'ON' all the time."

- KEVIN BORG, UCLA

Assistant Athletic Director for Facilities and Project Management





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# AUDACIOUS

PERKINS+WILL CASE STUDY



### TRANSFORMING AN OPEN OFFICE SPACE: PERKINS+WILL AND AUDACY®



**PREFACE** 

Perkins+Will chose the AUDACY Wireless Controls system for the remodeling of its Minneapolis, Minnesota office after seeing a demonstration from AUDACY rep Mlazgar Associates. Russell Philstrom, the Sustainable Design Team Leader of the Minneapolis office did not have any previous knowledge of either AUDACY or IDEAL®, but trusted the product after seeing the demonstration. "It's good to have a reputable name and a business that's been around for a while. They won't put out a product that they can't stand behind because their reputation is on the line," said Philstrom.

The Perkins+Will location in Minneapolis is a unique, open office concept with a few huddle rooms, exposed beams in the ceiling and a flexible sized area for worker cubicles. The specific areas where Audacy was installed were the cubicle area, small conference room "pods," a library full of architect material samples with a large glass window on one side and a large conference room/presentation area with a removable wall.

When asked what issues Philstrom was hoping to address in the space with AUDACY, he stated that the office was designed with flexibility in mind and that he needed something that would enable the space to be modified and changed over time. They were also aiming to obtain LEED certification for commercial interiors for the space, requiring them to follow very strict regulations.

#### **AT A GLANCE**

**BUILDING TYPE** Office Building Retrofit

> LOCATION Minneapolis, MN

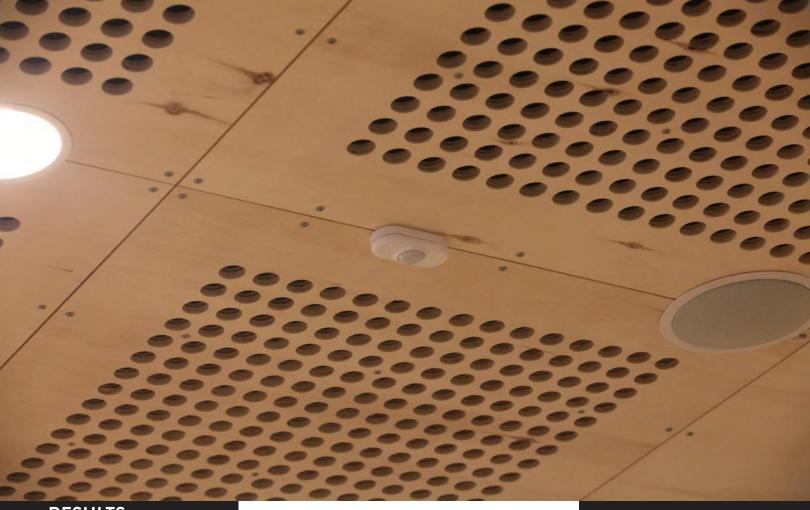
> > **FIXTURES** 159

#### **PROJECT SCOPE**

27 Motion Sensors 3 Light Sensors 19 Switches 1 Gateway

**COMMISSION DATE** 2016





#### RESULTS

After installing 27 motion sensors, 3 light sensors and 19 switches into the Perkins+Will location, Philstrom has experienced more flexibility than previously thought possible. He also found that it was much easier to pursue the LEED certification for commercial interiors after installing the AUDACY® system. Additionally, the company received more credits than they had originally anticipated (specifically credits for lighting controls; Credit 1.2 of LEED 2009: percentage of wattage on occupancy sensors and daylight sensors).

Perkins+Will has tested out the occupancy, daylight harvesting and scene programming features since installing AUDACY and can already tell it is saving them energy. "Setting the dim levels down to 10% instead of having emergency lights come on when space is unoccupied saves energy and gives occupants more comfort if working after hours or on weekends," said Philstrom.

### INSTALLATION CAPABILITIES

Occupancy

Vacancy

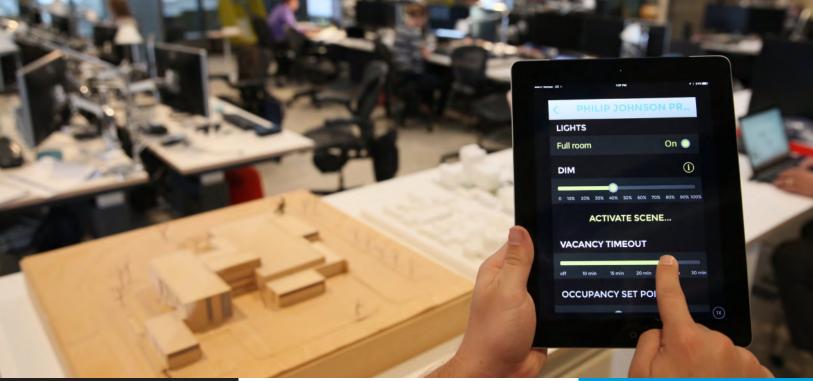
**Dimming** 

Scene Programming

Remote System Control

**Consumption Reporting** 





#### CONCLUSION

Perkins+Will turned to the AUDACY® Wireless Controls system by IDEAL® to install lighting controls in their Minneapolis, Minnesota open office space, which guarantee them flexibility and help in obtaining LEED certification for the building. With the system, employees were able to control their space simply and efficiently like they had never been able to before.

**ABOUT AUDACY** 

Audacy is a wireless energy management system that provides occupancy, vacancy, scheduling, daylight harvesting, scene control, energy reporting, and Building Automation System integration to commercial, industrial, or retail applications. It also provides remote system control via an online interface or via the Audacy app from any location with an Internet connection.

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P-5444 Rev. 12/16

"Lighting controls are crucial to a higher performance space. [...]

[It is] good to see systems out there that are becoming more user friendly so users can adapt a system to how they are actually using a space vs. how they thought they were going to use the space."

- Russell Philstrom, Perkins+Will Senior Associate: Sustainable Design Team Leader



## AUDACY® BE AUDACIOUS

CORPORATE OFFICE CASE STUDY **2016** 



## INSTALLATION OF IDEAL INDUSTRIES' NEW AUDACY® SYSTEM SIGNIFICANTLY REDUCES ENERGY USE



#### **PREFACE**

The Audacy® Wireless Lighting Controls system was retrofitted into a 10,000 sq. ft. area of a commercial office building. The section of the building into which the system was installed was an addition built in 1988. While the light fixtures had already been updated to T-8 fluorescents, no lighting controls were ever installed. Every row of lights were turned on and off at the breaker panel at the beginning and end of each day, resulting in a large amount of wasted energy on a daily basis.

The first installation of the Audacy system in the corporate office space was a purely retrofit application. Based on the energy savings and the benefits associated with this first installation, it was then decided to install Audacy in a completely newly renovated section of the building. This side of the building also experienced all of the same benefits from the Audacy installation as the retrofit application.

#### **AT A GLANCE**

BUILDING TYPE
Office Building Retrofit

LOCATION Sycamore, IL

FIXTURES 93 Fixtures

#### **PROJECT SCOPE**

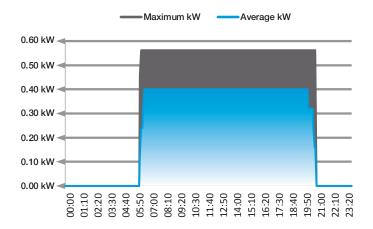
13 Motion Sensors 5 Light Sensors 6 Switches 1 Gateway

COMMISSION DATE 3/1/2014

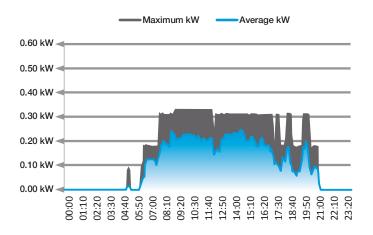
PROJECT RESULTS ~ 47% Energy Reduction

#### **ENERGY USAGE SNAPSHOT**

#### **BEFORE INSTALLATION: 2013**



#### **AFTER INSTALLATION: 2014**



PROJECT RESULTS: ~47% savings

#### **RESULTS**

The Audacy® Wireless Lighting Controls system was installed in early 2014. Combining occupancy, vacancy, dimming control, daylight harvesting, zone control, and remote system control, the electricity usage of the space was reduced by 47% after the installation. Prior to the installation, occupants were utilizing nearly .40 kW on average, with a maximum of ~.55kW. After the installation was complete, this was reduced by more than half with occupants only using between .10kW - .20 kW on average and having a maximum of only approximately .30kW.

#### **CORPORATE BENEFITS**

Cubicle occupants were given the ability to adjust the lighting in their respective areas, giving them customizable, individual control they never previously had.

The Audacy system was also installed in a newly renovated area of the same corporate office building as the original retrofit installation. This area experienced multiple benefits of the system, including Occupancy/Vacancy, Daylight Harvesting, Remote System Control, and Individual User Space Customization.

#### **INSTALLATION CAPABILITIES**

Occupancy

Vacancy

**Daylight Harvesting** 

Remote System Control

Individual User Space Customization





#### CONCLUSION

In both the retrofit and the new renovation areas, the Audacy® Wireless Controls system provided substantial energy savings to spaces that had previously been without any lighting controls. In addition to a significant amount of energy savings, building managers gained remote control of the space, and individual occupants were given the ability to customize their space to match their comfort needs and maximize their productivity.

#### **ABOUT AUDACY**

Audacy is a wireless energy management system that provides occupancy, vacancy, scheduling, daylight harvesting, scene control, energy reporting, and Building Automation System integration to commercial, industrial, or retail applications. It also provides remote system control via an online interface or via the Audacy app from any location with an Internet connection.





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# AUDACIOUS

IBEW LOCAL 340 CASE STUDY 2016



## INSTALLATION OF NEW AUDACY® SYSTEM SIGNIFICANTLY INCREASES EMPLOYEE MORALE AT IBEW LOCAL 340



#### **PREFACE**

The Audacy Wireless Lighting Controls system was retrofitted into a 5,314 sq. ft. area of the IBEW Local 340 commercial office building in Sacramento, CA. The sections of the building that were retrofitted included the clerical and administration areas as well as a meeting room that accommodates up to 125 people.

The need for the Audacy installation was based on the outdated lighting in all areas and the lack of dimming capabilities in the office spaces. The employees were also often plagued with headaches from the poor light levels in the office areas. The original lights were 2' x 4' standard drop-in troffer fixtures (T-8) that were installed over 20 years ago.

When asked, Tom Okumara stated that the biggest benefits for them were the dimming capabilities and the automatic controls of the system. The dimming capabilities made the office a more pleasant and productive setting for the staff, especially those that are at their desk for the majority of their work day. There was a noticeable difference of a higher morale in the workplace as the light levels and controls helped reduce migraine problems the employees had previously experienced. Also, the upgraded and modern look received multiple compliments from the employees.

#### **AT A GLANCE**

BUILDING TYPE
Office Building Retrofit

LOCATION Sacramento, CA

FIXTURES 56

#### **PROJECT SCOPE**

13 Motion Sensors 5 Light Sensors 19 Switches 56 Luminaire Controllers 1 Gateway

COMMISSION DATE February 19, 2016





#### CONCLUSION

In the retrofit application for IBEW Local 340's office areas and presentation room, the Audacy Wireless Controls system provided substantial energy savings to spaces that had previously housed outdated lighting and no lighting controls. In addition to a significant amount of energy savings, building managers gained remote control of the space, scene control was added to enhance presentations and morale was boosted amongst employees from the new light levels.

**ABOUT AUDACY** 

Audacy is a wireless energy management system that provides occupancy, vacancy, scheduling, daylight harvesting, scene control, energy reporting, and Building Automation System integration to commercial, industrial, or retail applications. It also provides remote system control via an online interface or via the Audacy app from any location with an Internet connection.

"I was surprised that Audacy was a subsidiary of IDEAL as I've only known IDEAL for their quality tools. This made me a little skeptical of the system at first. However, after the presentation of Audacy, I was confident of the product and the system's capabilities greatly due to the reputation of IDEAL. As with the tools, I knew IDEAL would have the same quality product for their lighting controls."

TOM OKUMURA
IBEW Local 340
Business Unit Manager





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### FREQUENTLY ASKED QUESTIONS

#### **GENERAL**

#### Q: IS AUDACY MADE IN THE USA?

A: YES: Made in the USA from US and Global Components.

#### Q: WHERE DID THIS TECHNOLOGY COME FROM?

A: The core technology was pioneered by Pittsburgh, PA-based Powercast Corporation. It has been in use in the HVAC industry since 2007. IDEAL formed a partnership with Powercast in 2013 and acquired the exclusive rights to the technology. It is now in use in lighting and HVAC installations across the country.

#### Q: WHAT IS THE WARRANTY FOR AUDACY PRODUCTS?

A: The Audacy products have a 5-year warranty in the U.S. and Canada.

#### Q: WILL WiFi INTERFERE WITH THE AUDACY SYSTEM?

A: The Audacy system operates via a proprietary wireless protocol in the highly-reliable 915 MHz spectrum, unlike WiFi, Bluetooth, or Zig-bee, which all operate at 2.4 GHz. This means little to no interference with other building networks.

#### Q: WHY IS THE SYSTEM LOCATED ON A 915 MHz FREQUENCY?

A: The 915 MHz spectrum has less loss than the 2.4GHZ spectrum. This allows for easier radio transmission through walls, concrete, etc. which increases range of the Audacy system.

#### Q: WHAT SYSTEMS DOES AUDACY INTEGRATE WITH?

A: Stand alone or integrates with Building Automation Systems (BAS) via BACNet®, LonWorks®, Metasys®, or MODBUS®.

#### Q: WHAT SECURITY PRECAUTIONS ARE IN PLACE FOR THE SYSTEM?

A: System security is achieved via a proprietary wireless protocol, SSL certificates, and 2048-bit encryption, in addition to login and password authentication.

#### Q: ARE THERE MOBILE APPLICATIONS FOR AUDACY?

A: Yes, mobile applications exist for the iOS platform. Search for Audacy in the Apple App Store and the app will be under the name of Audacy Lighting Controls.

#### Q: HOW MUCH INSTALLATION TIME DOES AUDACY SAVE VERSUS WIRED SYSTEMS?

A: The Luminaire Controller for the Audacy Wireless Controls System can be installed into an existing fixture in less than 3 minutes, versus up to 20 minutes for some wired systems.

#### Q: WHAT CAN BE VIEWED/CONTROLLED THROUGH THE BAS CONNECTION?

A:

Field	Control	Description
Occupied	Read Only	Status of current occupancy state of room
Timeout	Read/Write	Sets the amount of time after which the room is considered unoccupied
State	Read/Write	Sets the light level in the room. Value: 0-100 (dim level); 0 = relay off
Scene	Write Only	Sets the scene for a room
Switch	Read/Write	Read Battery voltage, read/set state. Value: 0-100 (dim level); 0 = relay off
Motion Sensor	Read Only	Battery Voltage
Light Sensor	Read Only	Lux Level, Battery Voltage







#### Q: CAN THE LIGHT STATES ON A ROOM GROUP LEVEL BE CONTROLLED USING THE BAS CONNECTION?

A: A room group cannot be controlled via the BAS connection. Room groups are controlled by the cloud server and are not defined in the Gateway. The cloud server sends individual commands to each room within a group to the Gateway to make changes to the group. A BAS could conceivably do the same thing.

#### Q: DOES THE END USER HAVE CONTROL OF DIMMING?

A: Dimming is controlled via a switch in the space or via a Light Sensor that commands a lower light level in the space. Dimming can also be controlled through the Audacy Interface via the website (Audacycontrols.com), or the mobile app.

#### Q: DOES THE AUDACY SYSTEM WARN THE END USER WHEN THE LIGHTS ARE ABOUT TO TURN OFF?

A: Yes, there will be a 60 second warning where the lights quickly dim and return to normal level.

#### Q: WHICH HAS THE HIGHER PRIORITY; USER INPUT OR A PROGRAMS SCHEDULE?

A: The user input from a switch, web Interface, or app command will override the Programs.

#### Q: ARE THE AUDACY COMPONENTS ROHS COMPLIANT?

A: Yes

#### Q: ARE THE AUDACY COMPONENTS MANUFACTURED AT AN ISO-9000 CERTIFIED PLANT?

A: Yes

#### Q: HOW DOES AUDACY WORK WITH EMERGENCY FIXTURES?

A: This will depend on the type of emergency fixture, battery or generator backup. Local codes regarding emergency fixtures may also have an impact on the functionality of the Audacy system in these situations. Contact Audacy support (contactus@ audacywireless.com) for more information on a specific application.

#### Q: HOW DOES AUDACY HANDLE SITUATIONS WHERE THE EMERGENCY LIGHTS NEED TO BE TURNED OFF (E.G. **AUDITORIUMS)?**

A: Audacy has the ability to drive the E/M to one of the following two modes when the regular lights are off. In both modes the E/M fixture is controlled via the dimming lines from a fixture in the same "zone". If the regular power goes away then the dimming voltage goes away also and the E/M fixture will be turned full ON.

"Night Light mode" (default): E/M fixtures are full ON when regular lights are OFF in the zone. The dimming lines will appear open when the fixture is commanded to turn OFF and the E/M fixture will be full brightness.

"Daylight mode": E/M fixtures are OFF when regular lights are OFF in the zone. The dimming lines will have a "0 volt" output and the E/M fixture will be OFF. This mode can only be changed via the Gateway Interface and is not available via the web Interface. Can be set on a per Luminaire Controller basis by selecting "Invert Relay Off Dimming".

#### **GATEWAY**

#### Q: IS THE GATEWAY PLENUM RATED?

A: Yes. The Gateway is Plenum Rated, however it does not meet the more stringent Plenum Rating of Chicago, IL.

#### Q: WHAT IS THE MAXIMUM NUMBER OF DEVICES PER GATEWAY?\*

A: 250 Luminaire Controllers, 100 Plug Load Controllers, 381 (125 physical and 256 virtual) switches, 100 Motion Sensors and 25 Light Sensors.

\* Per GW-1100 Gateway

#### Q: HOW FAR CAN THE GATEWAY COMMUNICATE?

A: The typical range within line of sight between the Gateway and the furthest device is about 300 ft. In installation environments with walls and/or metal structure barriers, the range is less. A repeater function can be enabled on the Luminaire Controllers to extend the range to meet difficult RF environments. We recommend limiting the maximum number of repeaters tied to a Gateway to 5.

#### Q: CAN THE PROXY RUN ON A VIRTUAL MACHINE?

A: Yes





#### Q: CAN THE PROXY RUN ON WINDOWS SERVER 2012 R2 OS?

A: Yes

#### Q: CAN THE PROXY BE SET TO START AUTOMATICALLY AFTER A REBOOT?

A: Yes, but currently only on 64 bit Windows machines. Contact Audacy support for more information.

#### Q: WHAT DEVICES/FEATURES WILL CONTINUE TO WORK IF THE GATEWAY LOSES FUNCTION?

A: All switches, including scene switches, will continue to function without the Gateway. If occupancy was configured and the room was unoccupied when the Gateway lost function the Motion Sensor will turn the lights on. Vacancy won't function and the lights will remain on unless manually turned off from a switch. Daylighting, web/iOS control, ADR events and schedules won't function without the Gateway. Consumption will continue to be calculated based on the last known state of the fixtures.

#### Q: WHAT HAPPENS WHEN THE RECESSED BUTTON ON THE FRONT OF THE GATEWAY IS PRESSED?

A: Pressing this button will reset the IP address back to default. No device configuration will be lost. Make sure the Gateway has been powered up for at least one minute prior to pressing this button and wait at least one minute after pressing the button before trying to connect.

#### Q: WHAT ARE THE DEFAULT SETTINGS FOR LOGGING INTO THE GATEWAY?

A: The Field Support Engineer helping to Commission the system will provide this information.

#### Q: WHY DOES THE GATEWAY SHOW A RED LIGHT BY THE! WITH THE TRIANGLE AROUND IT?

A: The battery in the Gateway is discharged. Leave the Gateway plugged in to charge the battery. The Gateway will not boot up until the battery is sufficiently charged. Depending upon the charge state of the battery this may take an hour or more. Long term storage or frequently unplugging the Gateway can discharge the battery. The battery provides enough power for the Gateway to properly shut down after a power loss.

#### Q: IN THE EVENT OF A POWER FAILURE, WILL THE GATEWAY STILL EXECUTE A SCHEDULE THAT WOULD HAVE BEEN IN PROGRESS HAD IT BEGUN DURING THE POWER OUTAGE?

A: If the Gateway loses power in the outage, the event that would turn the lights on would not happen. If the Gateway has a UPS or other power backup and only the Controllers lose power, the Gateway will put the Controllers at the correct level when they regain power.

#### **DEVICES**

#### Q: IS THERE A MAXIMUM NUMBER OF DEVICES PER ROOM?

A: No. The maximum amount of devices allowed can be assigned to a single room if needed.

#### Q: WHAT IS THE BATTERY LIFE OF THE DEVICES?

A: Our proprietary low-power approach allows us to achieve a 25-year battery life on our battery-powered devices such as switches, Motion Sensors, and Light Sensors.

#### Q: WHAT IS THE DIFFICULTY LEVEL IN ADDING OR REPLACING DEVICES?

A: New or replacement devices can be physically installed anywhere due to the wireless nature of the system. Then, devices can be scanned into the system using the Audacy mobile app and the mobile device's camera.

#### Q: CAN THERE BE MULTIPLE MOTION SENSORS IN A ROOM CONTROLLING DIFFERENT LIGHT FIXTURES?

A: Yes. For occupancy, a Motion Sensor will turn on only the Luminaire Controllers it is associated with. For vacancy, they won't turn off until the entire room is unoccupied. As there is only one vacancy timeout for the entire room all Motion Sensors in the room must see no motion for the room to time out and the lights to be turned off. If both occupancy and vacancy are needed on different light fixtures in a room, the room should be broken down into multiple Rooms/zones through the Interface.

#### Q: IF THERE IS MORE THAN ONE LIGHT SENSOR PER ROOM CAN TWO DIFFERENT ZONES BE CONTROLLED?

A: Yes. A drop down is available to select which sensor to adjust. If all the sensors aren't set the same the display on the main menu will be grayed out. There is no limit on the number of Light Sensors per room. (Note: Any given Luminaire Controller can be associated to just a single Light Sensor.)







#### Q: HOW DO YOU KNOW IF A DEVICE IS DEFECTIVE?

A: The Audacy system will report three types of errors:

- 1: Lost connectivity with a device
- 2: Low Battery
- 3: Gateway Unresponsive

#### Q: HOW ARE THE A & B CHANNELS UTILIZED ON DIFFERENT DEVICE TYPES?

A:

Sensors & switches – Transmit on both the A&B channels at all times. Luminaire Controllers - Transmit and receive on the specified channel only Gateway - Transmit and receive on both A&B channels at all times.

#### Q: CAN THE FIXTURE BE DIMMED SMOOTHLY WHEN CHANGING SCENES?

A: Yes. There are two fade rate settings that can be edited via the Gateway interface.

- 1. Luminaire Controller: Fade rate applies when controlling the lights from the web/mobile app (except virtual switches). This can be set on each Controller individually from the Gateway or it can also be set to 0-10 sec via the audacycontrols.com website. This equates to the amount of time in seconds it takes to make the change between light levels. For example, if set to 3 seconds it would take 3 seconds to make the change regardless of the dim level change. Therefore, dimming from 0-100% or from 100%-50 % would both take 3 seconds.
- 2. Switch: Fade rate applies when using a physical or virtual switch. This is how long it takes to change light levels with each button press. If set to 1 second and the raise/lower buttons on the switch are pressed, it will take 1 second to move one step (10%). Longer fade rates are best suited for Scene Switches. Raise/Lower switch fade rates should be kept very short to avoid long delays after a button press and On/Off Switches should be set to 0 to avoid a delay in the fixture turning off when the Off button is pressed.

#### LUMINAIRE CONTROLLERS

#### Q: WILL MODIFYING A FIXTURE WITH A LUMINAIRE CONTROLLER VOID THE UL WARRANTY?

A: Because the Luminaire Controllers are listed to UL 1598B as a Retrofit Kit, they can be installed in a UL Listed luminaire without affecting the fixture's UL Listing.

#### Q: CAN THE LIGHT STATES ON AN INDIVIDUAL LUMINAIRE CONTROLLER BE CONTROLLED USING THE BAS CONNECTION?

A: From the BAS, light states can be changed at the room and switch leg levels. Any change injected to the BAS port will change the state of all lights in a room or given switch leg. Controlling light states on an individual Luminaire Controller via the BAS can be accomplished by creating a virtual switch and associating it with the desired Controller which can then be controlled via the switch leg. A Scene can also be set for the room over the BAS.

#### Q: WHEN SHOULD CHANNEL A VS. CHANNEL B BE USED ON A LUMINAIRE CONTROLLER?

A: Leaving the channel set to A is appropriate for most installations. Channel B may be used to optimize packet transmission over the RF Channel in the following scenarios:

- a. In a multiple Gateway system set Luminaire Controllers configured on one Gateway to a different channel than the Luminaire Controllers on a Gateway in an adjacent space.
- b. If there is RF interference on Channel A set Luminaire Controllers to Channel B.
- c. Repeaters can be set up on both Channel A and B to provide redundant communication paths of switches and sensors to the Gateway.

#### Q: WHAT IS THE CURRENT RATING FOR THE 0-10V DIM CIRCUIT OF A LUMINAIRE CONTROLLER?

A: Luminaire Connector as source: 2mA; Sinking (ballast as source): 4mA

#### Q: WHEN SHOULD THE ELV LUMINAIRE CONTROLLER BE USED VS. THE LINE/TRIAC DIMMING LUMINAIRE CONTROLLER?

A: All fixtures should be tested for compatibility to ensure they will dim properly. However, as a rule of thumb use ELV for most LED fixtures including Edison base retrofit lamps such as PAR. Line/Triac dimming should be used for incandescent and MLV (magnetic) LED fixtures such as strip lights with a separate transformer.







#### Q: HOW MANY CYCLES IS THE LUMINAIRE CONTROLLER RATED FOR?

A: The relay has a mechanical endurance of > 100,000 operations

#### Q: WHAT HAPPENS IF THE LOAD AND LINE WIRES ON THE LUMINAIRE CONTROLLER GET SWITCHED?

A: The fixture may or may not turn on. Controllers with 0-10V dimming will initially turn on the fixture but once the load is turned off the Controller will cease functioning. ELV and Line Controllers likely won't work at all.

#### WEBSITE

#### Q: HOW DOES AUDACY MEASURE CONSUMPTION?

- 1. Luminaire Controller is installed, nominal operating voltage and Ampere draw is entered into the Audacy Interface.
- 2. Type of fixture is entered (fluorescent or LED). When a fixture is powered on and set to a specific dim level, the Audacy system calculates the nominal power consumption. This is a calculated value that can later be downloaded as a report.

#### Q: HOW OFTEN DOES THE OCCUPANCY STATUS ON AUDACYCONTROLS.COM UPDATE?

A: Once per minute.

#### Q: HOW OFTEN IS ENERGY DATE RETRIEVED FOR CONSUMPTION REPORTING?

A: consumption information is updated every five minutes for each Luminaire Controller for calculation purposes but is only saved as an hourly figure per room.

#### Q: IF THERE ARE MULTIPLE GATEWAYS ON AN ACCOUNT HOW ARE THEY DISPLAYED ON AUDACYCONTROLS.COM AND THE IOS APP?

A: All rooms from all Gateways would be presented together as one system. The fact that the rooms are distributed between multiple Gateways is transparent to the user.

#### Q: WHY IS A DEVICE THAT WAS ADDED VIA THE GATEWAY INTERFACE NOT VISIBLE ON AUDACYCONTROLS.COM?

A: To see devices the user must go into the SETUP tab on audacycontrols.com, open the Gateway and select "Reload Rooms and devices from Gateway".

#### COMMISSIONING

#### Q: HOW LONG DOES IT TAKE TO LOAD THE SOFTWARE AND PROGRAM THE DEVICES TO THE SYSTEM?

A: The Audacy Proxy software takes a few minutes to load.

- 1. The web Interface is used to enter devices into the Gateway memory.
  - This may take 10 -15 seconds per device.
- 2. Once all devices have been entered into memory, the rooms and association are created .
  - As an example, a room with 6 fixtures, 1 Occupancy Sensor, 1 Light Sensor and 1 Remote Switch may take up to 5 minutes

#### Q: WHERE DOES THE PROXY SOFTWARE RESIDE?

A: Audacy Proxy Software must run on a local computer or virtual machine on the premises where it is being installed.

#### Q: WHAT IS THE MINIMUM VACANCY TIMEOUT THAT CAN BE SET?

A: The minimum vacancy timeout is 10 minutes. If the vacancy timeout is set to less than this threshold the lights will turn off at the end of the timeout period but they may not turn on when occupancy is detected.

#### Q: HOW ARE VACANCY AND/OR OCCUPANCY CONFIGURED?

A: Adding a Motion Sensor to a room will enable the vacancy timeout field for that room. Setting the timeout to anything other than "off" will enable vacancy on all Luminaire Controllers in the room. Associating a Motion Sensor to a Luminaire Controller(s) will enable occupancy for the associated Luminaire Controllers.







#### Q: WHAT HAPPENS WHEN VACANCY TIMEOUT IS SET TO "OFF"?

A: When vacancy timeout is set to off the lights will not turn off automatically regardless of occupancy status.

#### Q: CAN A VIRTUAL SWITCH BE CREATED TO ALLOW THE USER TO CONTROL SPECIFIC LIGHT(S) FROM THE WEB/MOBILE APP?

A: Yes. Simply add a new switch by creating a unique serial number that starts FF04XXXX.

#### Q: IF THERE ARE MULTIPLE LIGHT FIXTURES AT DIFFERENT DIM LEVELS IN A ROOM AND THE BRIGHTNESS IS TURNED UP, WHAT HAPPENS?

A: All fixtures will change by 10% of the current state for each step if using a dimming switch. So if the brightness is turned down one step and one fixture is at 100% and another is at 20% they will go to 90% and 10% respectively. If the brightness is adjusted using the website or app, the entire room, or an individual switch leg, will go to the set level.

#### Q: IF THE MAXIMUM DIM IS SET AT A VALUE < 100% AND A SCENE IS SET AT 100% WILL SETTING THE SCENE ALLOW THE **LUMINAIRE CONTROLLER TO GO TO 100% DIM?**

A: No, the maximum dim setting has ultimate control so the Scene will only go as high as the maximum setting for that Luminaire Controller.

#### Q: CAN ROOM GROUPS WORK ACROSS MULTIPLE GATEWAYS ON THE SAME ACCOUNT?

A: Yes

#### Q: WHAT IS THE AUDACY DEFAULT DURING LOSS OF POWER?

A: All lights will default to ON at 100% upon returning from a power loss. Assuming the Gateway was affected by the power loss as well, it will go through an initialization/discovery phase to determine which rooms are occupied or vacant and shut vacant rooms off.

#### Q: IF THE INTERNET CONNECTION IS LOST WILL SCHEDULING STILL WORK?

A: Yes. The schedule is downloaded from the cloud to the Gateway. However, no changes to the schedule can be made until the Internet connection is restored.

#### Q: CAN A SWITCH BE ADJUSTED SO THAT PRESSING THE SWITCH WILL TURN THE LIGHT ON AT A LEVEL OTHER THAN 100%?

A: Yes. From the Gateway Interface this can be set on a per switch basis by entering the desired level in the field "ON command sets level to ... "

#### Q: WHY WOULD A USER SEE AN "INVALID DATE" ERROR WHEN ADDING IN A RECURRING DATE IN A PROGRAM?

A: The month must be two numbers. I.e. January = 01 not 1

#### Q: WHEN USING PROGRAMS, DOES THE VACANCY TIMEOUT HAVE TO EXPIRE BEFORE THE LIGHTS TURN OFF?

A: No. The lights will turn off at the end of the scheduled time. However, if a room is occupied at the expiration of the schedule, occupancy will take over and keep the room from timing out since it isn't vacant.

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P-5327 Rev. 3/17

FREQUENTLY ASKED QUESTIONS