SectorFlex
Intelligent Digital Lighting Control System
Energy Management Solution

Energy Savings. Flexibility. Easy Installation.

BENEFITS OF SECTORFLEX

Whether the goal is cost- and time-saving installation, building energy efficiency, certification to national energy conservation regulations, retrofitting, flexibility, or building automation, Leviton's Sector Intelligent Digital Lighting Control System meets any application.

EASY TO DESIGN.

The flexible, topology- and polarity-free SectorFlex system offers limitless future expansion opportunities. Easily create a lighting design with various levels of lighting control including switching, distributed dimming, occupancy sensing, and daylight harvesting anywhere – from a single room to an entire campus of buildings.

EASY TO INSTALL.

All SectorFlex components – including occupancy sensors, photocells, relays, switches, dimmers, and controllers – are interconnected using the same wiring throughout the entire system using a topology-free technique.

EASY TO MONITOR, MANAGE, AND MAINTAIN.

SectorFlex's graphical point-and-click/drag-and-drop software offers centralized control and scheduling to make system configuration, reconfiguration, and maintenance easy and convenient.

EASY ENERGY SAVINGS.

Cost-effectively save up to 40% or more by combining switching, distributed dimming, occupancy sensing, and daylight harvesting energy saving technologies in one integrated system.

EASY CODE COMPLIANCE.

Meet today's stringent energy codes and performance requirements easily.

BUILDING PROFESSIONALS, ARCHITECTS, SYSTEM INTEGRATORS, PLANNERS, AND INSTALLERS.
Flexibility, installation interoperability, simplicity, environmentally friendly.

BUILDING OWNERS, FACILITY MANAGERS, AND PRIVATE CONSUMERS.
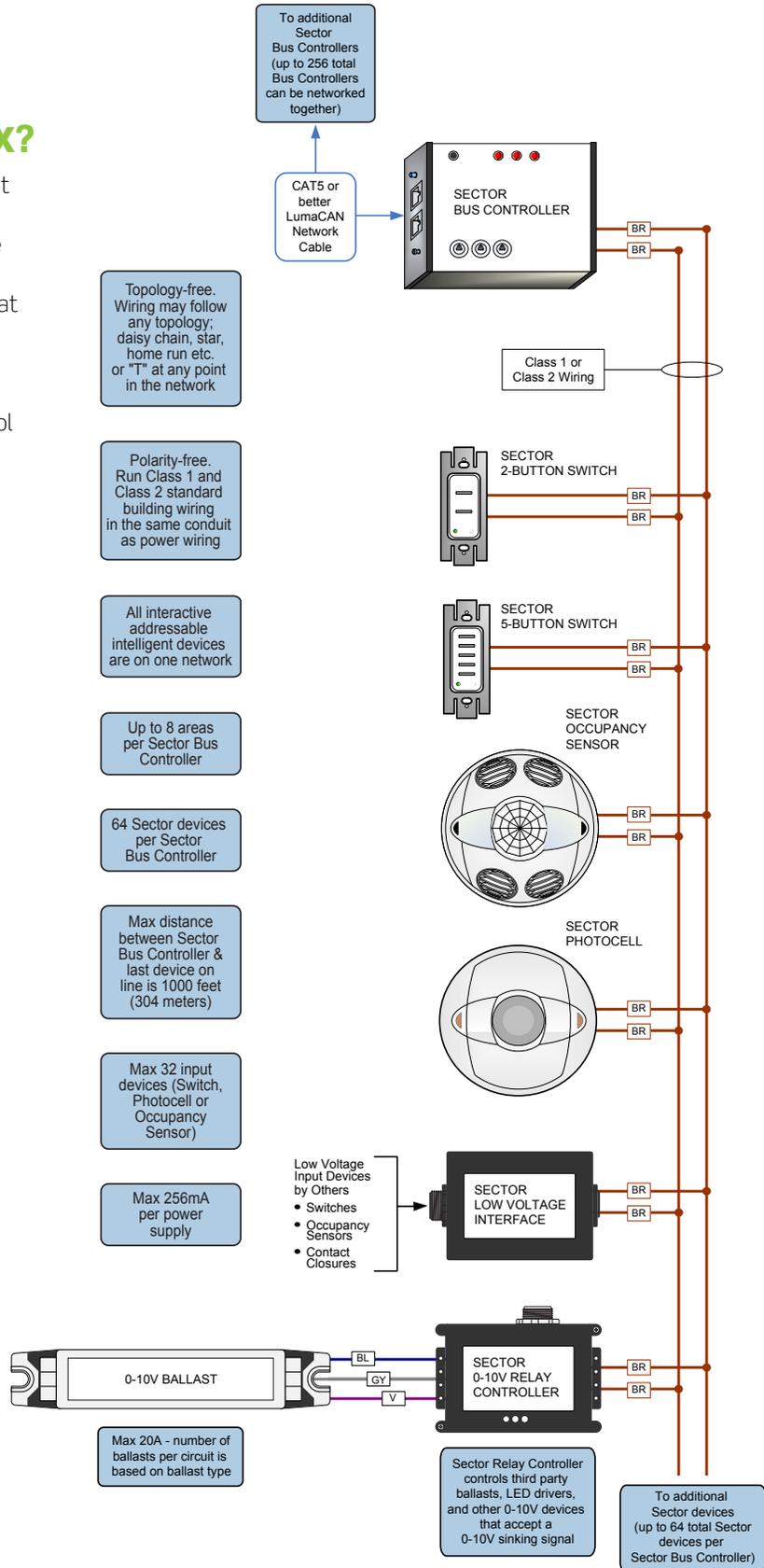Energy savings, cost benefits, flexibility and comfort, simplicity.

LEVITON SECTORFLEX

WHAT IS SECTORFLEX?

SectorFlex is the latest development from our Sector Intelligent Digital Lighting Control System to offer the most cost effective and energy efficient lighting control solution that works with either Sector Ballasts or virtually any 0-10v ballast ballast or load. SectorFlex works for either switching or dimming lighting control and gives you the full power of the Sector design with the flexible and cost effective SectorFlex system.

As with our Sector system, SectorFlex integrates scheduling, daylight harvesting, occupancy sensing, dimming and manual control into an intelligent digital lighting control system. SectorFlex systems are easy to design, install and program and provides both energy savings and increase occupant comfort and productivity.

To additional Sector Bus Controllers (up to 256 total Bus Controllers can be networked together)

CAT5 or better LumaCAN Network Cable

SECTOR BUS CONTROLLER

BR
BR

Topology-free. Wiring may follow any topology; daisy chain, star, home run etc. or "T" at any point in the network

Class 1 or Class 2 Wiring

Polarity-free. Run Class 1 and Class 2 standard building wiring in the same conduit as power wiring

SECTOR 2-BUTTON SWITCH

BR
BR

All interactive addressable intelligent devices are on one network

SECTOR 5-BUTTON SWITCH

BR
BR

Up to 8 areas per Sector Bus Controller

SECTOR OCCUPANCY SENSOR

64 Sector devices per Sector Bus Controller

BR
BR

Max distance between Sector Bus Controller & last device on line is 1000 feet (304 meters)

SECTOR PHOTOCELL

BR
BR

Max 32 input devices (Switch, Photocell or Occupancy Sensor)

Max 256mA per power supply

Low Voltage Input Devices by Others
• Switches
• Occupancy Sensors
• Contact Closures

SECTOR LOW VOLTAGE INTERFACE

BR
BR

0-10V BALLAST

BL
GY
V

SECTOR 0-10V RELAY CONTROLLER

BR
BR

Max 20A - number of ballasts per circuit is based on ballast type

Sector Relay Controller controls third party ballasts, LED drivers, and other 0-10V devices that accept a 0-10V sinking signal

To additional Sector devices (up to 64 total Sector devices per Sector Bus Controller)

FLEXIBLE AND TIME-SAVING DESIGN
FOR SPECIFYING ENGINEERS AND ARCHITECTS

- Ultimate time-saving design flexibility – easily integrate various lighting control capabilities – switching, distributed dimming, scheduling, occupancy sensing, and daylight harvesting in one system

- Scalable solution offers future expansion opportunities

- Easy energy code compliance

- Eligible for LEED points

SIMPLE AND COST-EFFECTIVE INSTALLATION
FOR CONTRACTORS

- Simplified wiring using Class 1 or Class 2 wiring throughout the entire system reduces installation costs by as much as 35% or more

- Run data and power wiring in the same conduit to further simplify installation and reduce installation costs

- The topology free design eliminates the need for "home run" wiring to greatly reduce both material and labor cost

OCCUPANT SATISFACTION AND MAXIMUM CONTROL
FOR END USERS

- Occupancy satisfaction with maximum control and easy customization from the occupant's desktop

- Remotely control and administer upgrades down to a device using an intuitive software interface

- Quickly implement load shedding and safety overrides

- Easily streamline maintenance for the entire lighting system

- Reduce energy costs up to 40% or more

LEVITON LEVERAGES ENERGY SAVING TECHNOLOGIES

Leviton leverages the benefits of occupancy sensing, daylight harvesting and dimmable lighting technologies into the SectorFlex intelligent lighting control system for easy energy savings.

HOW YOU CAN SAVE ENERGY WITH SECTORFLEX

DIMMED LIGHTING

One of the easiest ways to reduce electricity consumption is via a combination of dimmers and task lighting. Not only do dimmed lights draw less electricity, they produce less heat—and that can reduce cooling costs, which can really add up in warmer climates. As a general rule: the more you dim, the more you save.

OCCUPANCY DETECTION

Occupancy sensors provide automatic switching of lighting and building loads. Not only does this ensure that lights go off when not needed, hands-free switching is extremely convenient because it takes the burden away from whoever is using the space. A new breed of devices, manual-on occupancy sensors, provides maximum savings by requiring user intervention and eliminating false-on triggers. Actual savings from occupancy sensors vary greatly depending on usage patterns and occupant habits.
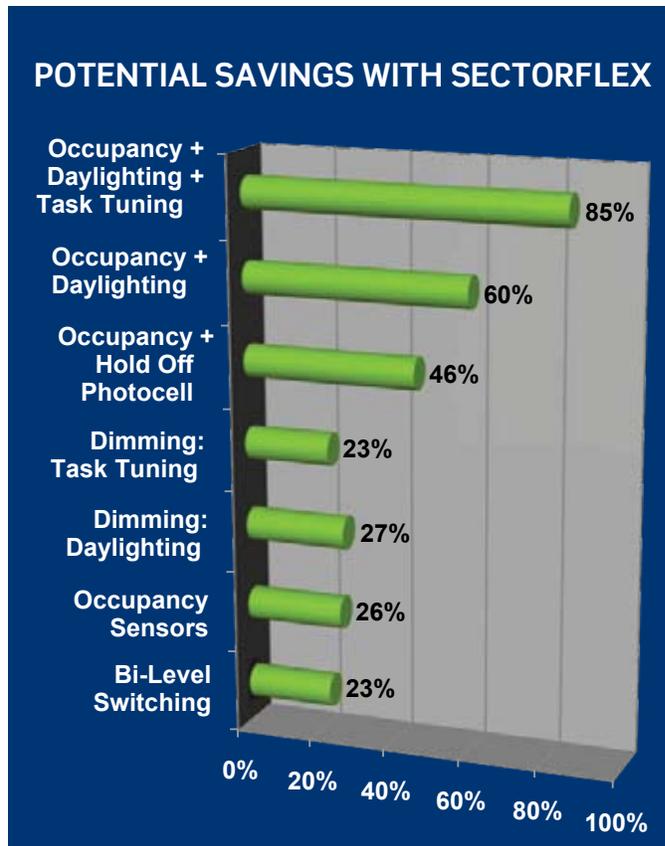
DAYLIGHT HARVESTING

Daylight harvesting technology maintains a programmed level of light by precisely adjusting the output of a room's luminaires to compensate for the contribution of natural daylight. A typical system uses photo-cells to measure the ambient light and then automatically dim or brighten to achieve a user-programmed level of light. By utilizing free light, daylight harvesting can reduce electricity bills as much as 60%.

TIMED CONTROLS

Automated switching of lights and other loads are a sure-fire way to ensure that devices are only on when needed. Sector lighting control systems provide advanced load scheduling based on chrono-logical or astronomical time and are compatible with other lighting controls and sensors for a comprehensive approach that maximizes overall energy savings.
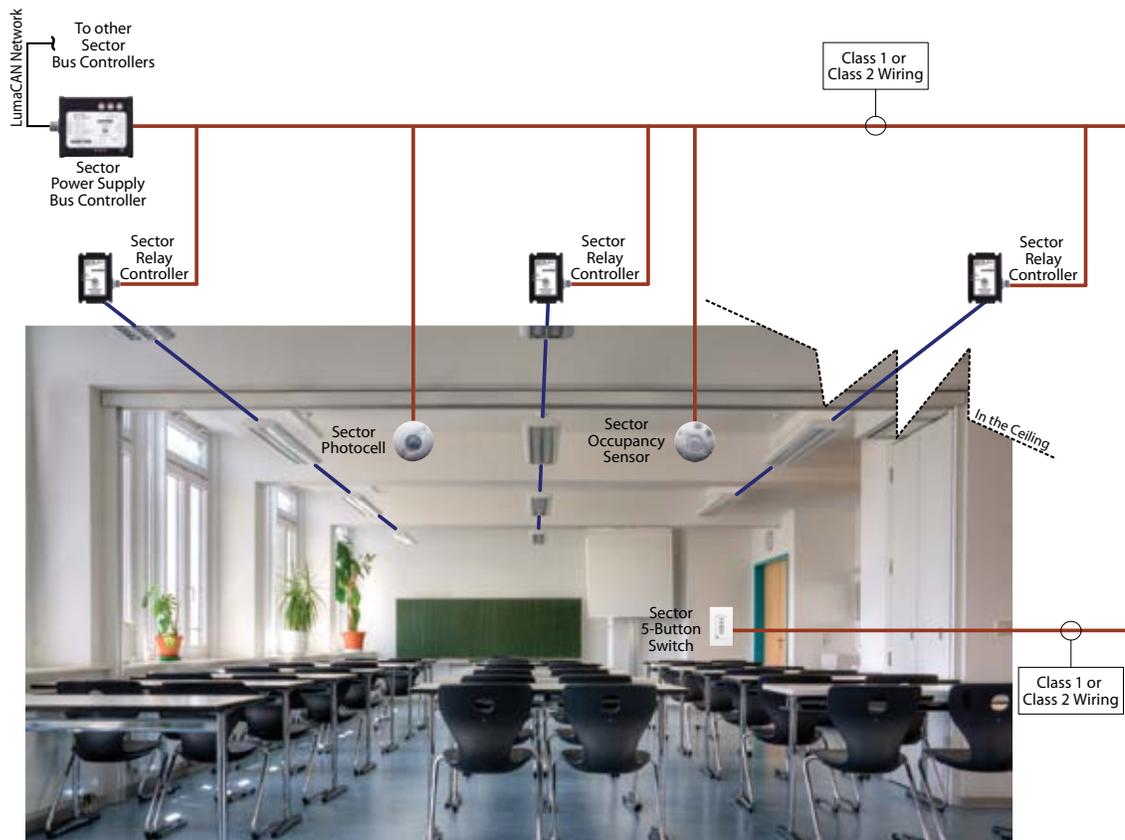
INTEGRATION WITH BUILDING CONTROLS

When lighting, security, HVAC and other building management systems are integrated into a single control system, optimal energy efficiency is one of a host of benefits. Integrated systems provide superior interoperability as well as an essential function for companies participating in load shedding programs —and can garner points towards LEED certification.

POTENTIAL SAVINGS WITH SECTORFLEX

Category	Savings
Occupancy + Daylighting + Task Tuning	85%
Occupancy + Daylighting	60%
Occupancy + Hold Off Photocell	46%
Dimming: Task Tuning	23%
Dimming: Daylighting	27%
Occupancy Sensors	26%
Bi-Level Switching	23%

Data provided by US Environmental Protection Agency

SECTORFLEX APPLICATIONS

LumaCAN Network

To other
Sector
Bus Controllers

Sector
Power Supply
Bus Controller

Sector
Relay
Controller

Sector
Relay
Controller

Sector
Relay
Controller

Class 1 or
Class 2 Wiring

Sector
Photocell

Sector
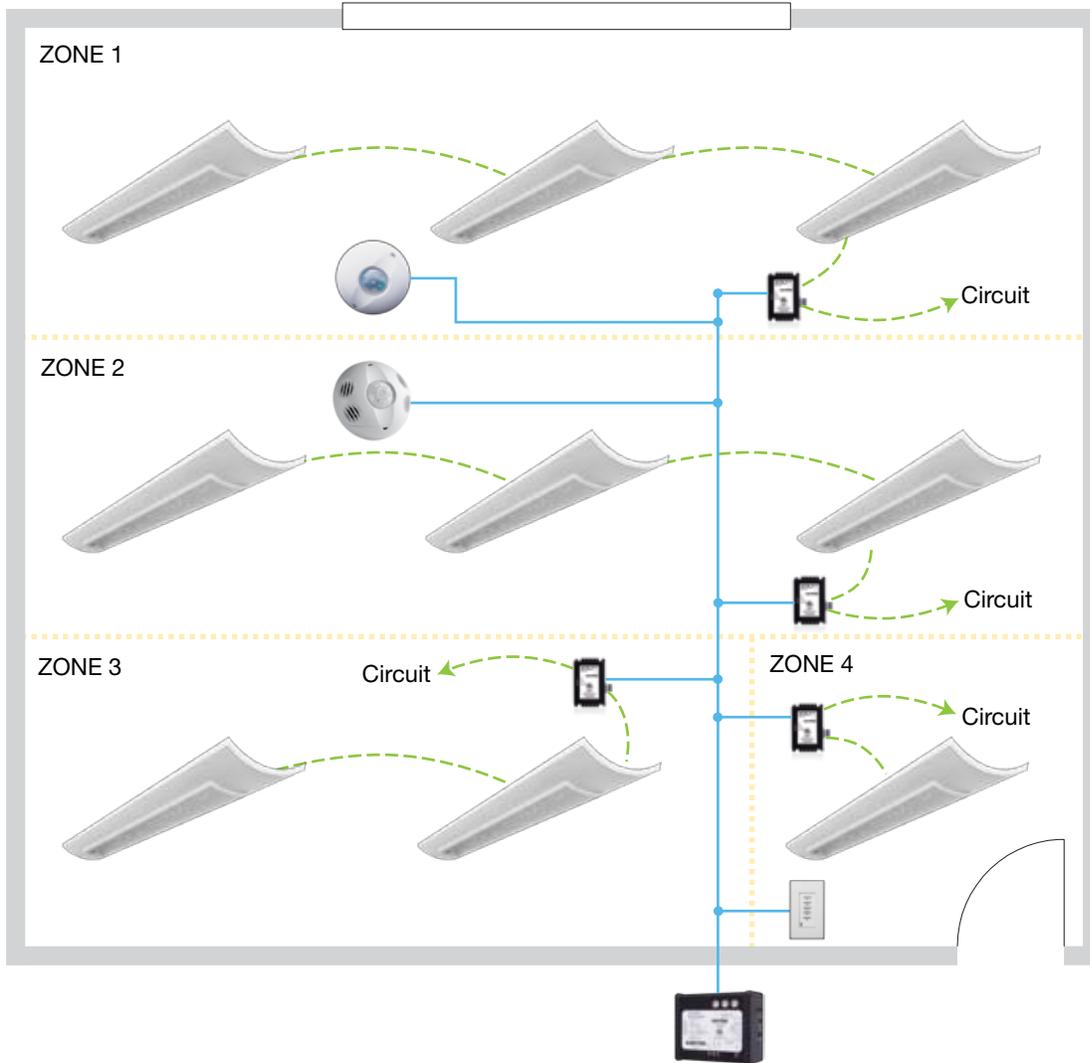Occupancy
Sensor

In the Ceiling

Sector
5-Button
Switch

Class 1 or
Class 2 Wiring

The low cost, easy installation and low maintenance of Leviton SectorFlex solutions make it easier than ever for areas such as K-12 schools and open office spaces to take advantage of energy saving wireless lighting control. Use SectorFlex in office buildings, medical offices, universities, labs, restaurants, government facilities and any other location that could benefit from the cost savings and energy efficiency of a controlled lighting environment.

- Schools
- Offices
- Retail Stores
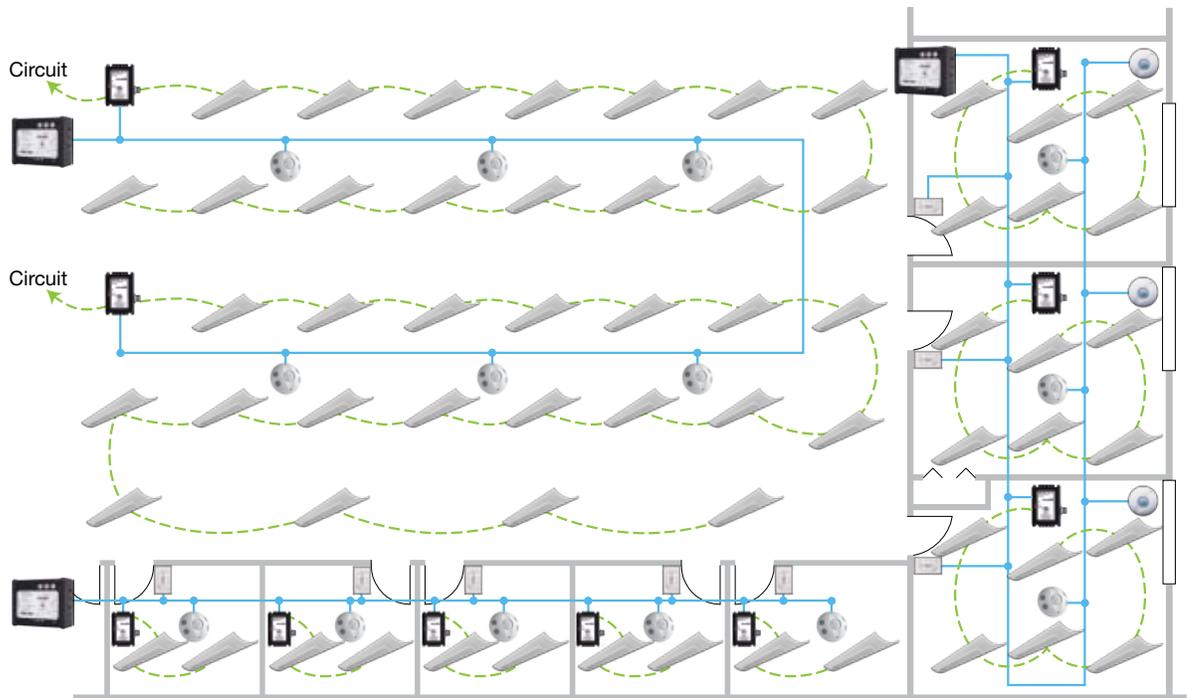- Convention Centers
- Airports
- Virtually Any Commercial Building

ZONE 1

ZONE 2

ZONE 3

ZONE 4

Circuit

Circuit

Circuit

Circuit

CLASSROOM – 4 ZONES:

This typical classroom configuration achieves daylight harvesting with a photocell and occupancy sensor that turns off the light when the room is vacant

- Four SectorFlex relays dim all the lighting within the zone to the same lighting percentage

- Each row of lighting can be dimmed to different levels based on the availability of natural light. This setting will dim the lights nearest the window to match the lighting output of fixtures further away
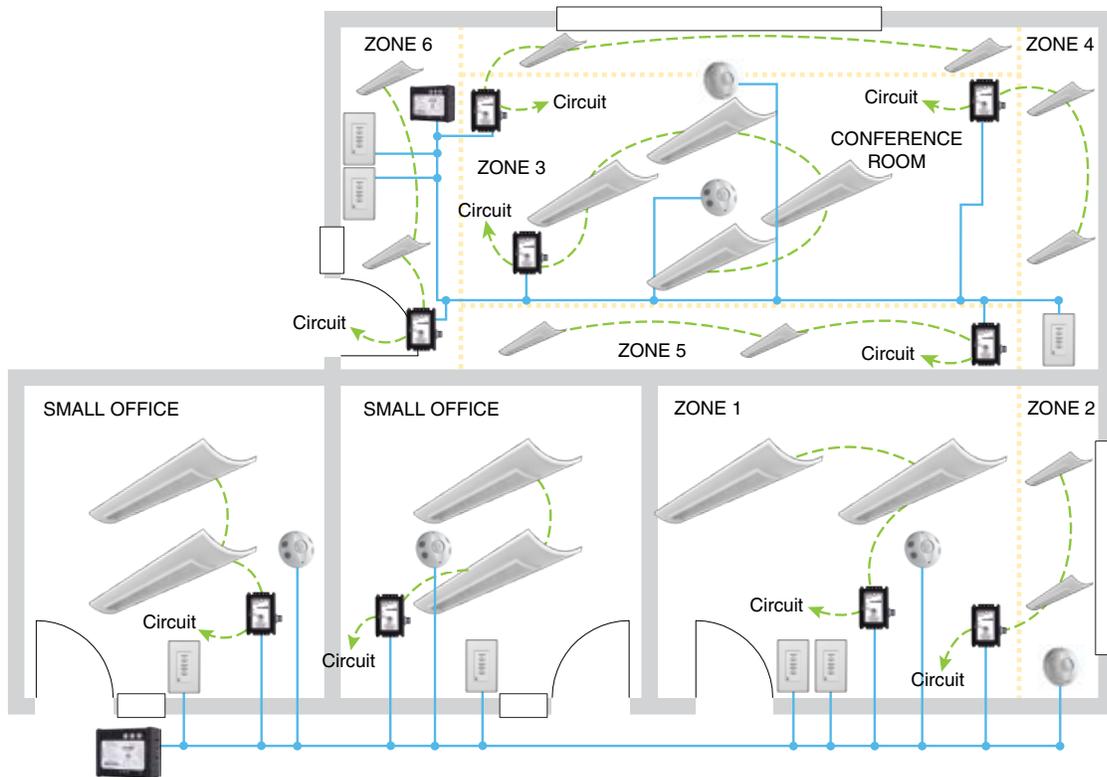
	0-10V fluorescent dimming ballast and fixture
	Sector Relay (0-10V plus switched power)
	Sector Bus Controller and Power Supply
	Sector Occupancy Sensor Multi-Tech
	Sector Photocell
	Sector 5-Button Switch
	Line /Load
	Sector Bus wiring runs only (2 @ #12 - #18 AWG)
ZONE	Sector Bus Controller- Area-Zone designator
	Sector Bus Controller- Area-Zone separator

Circuit

Circuit

OPEN PLAN WITH PERIMETER OFFICES:

Various configurations are set for open areas and perimeter offices along the bottom and right side

- Occupancy sensors control lighting, but occupants may control the fixtures in their area only with the SectorFlex Personal Dimmer software

- Occupancy sensors and SectorFlex control stations maintain the light source in each of the bottom offices and are placed on its own Bus Controller

- Offices along the right are equipped with occupancy sensors to turn the lights off when the room is vacant. Additional wall controls and a photocell configure lighting based on the fixtures proximity to the window (Daylight Harvesting)
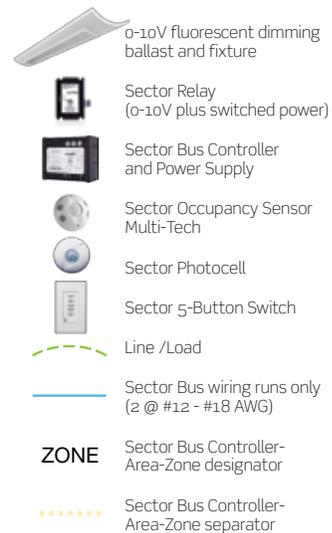
0-10V fluorescent dimming ballast and fixture

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(0-10V plus switched power)

Sector Bus Controller
and Power Supply

Sector Occupancy Sensor
Multi-Tech

Sector Photocell

Sector 5-Button Switch

Line / Load

Sector Bus wiring runs only
(2 @ #12 - #18 AWG)

Diagram labels: ZONE 6, ZONE 4, ZONE 3, CONFERENCE ROOM, ZONE 5, SMALL OFFICE, SMALL OFFICE, ZONE 1, ZONE 2, Circuit (multiple)

OFFICE AREA – MULTIPLE ZONES:

Each area may be controlled independently and each room can be segregated by zone for customizable control. Incorporate Leviton Dimension architectural lighting control station to manage lighting controls for the room from a single interface

- Rooms are equipped with photocells and occupancy sensors to achieve optimal Daylight Harvesting

- The two small offices and the large office connect to the same Bus Controller because of their simple lighting requirements

- Setting the conference room to one Bus Controller maximizes flexibility and control of lighting preferences

Legend:

	0-10V fluorescent dimming ballast and fixture
	Sector Relay (0-10V plus switched power)
	Sector Bus Controller and Power Supply
	Sector Occupancy Sensor Multi-Tech
	Sector Photocell
	Sector 5-Button Switch
– – –	Line /Load
——	Sector Bus wiring runs only (2 @ #12 - #18 AWG)
ZONE	Sector Bus Controller-Area-Zone designator
·······	Sector Bus Controller-Area-Zone separator

COMPONENTS

Leviton's SectorFlex Intelligent Lighting Control System combines several energy saving technologies – occupancy sensing, daylight harvesting and dimming – into one conveniently integrated system. This topology free system uses the same wiring type for all SectorFlex components and accessories making it one of the easiest lighting control systems to install. To further simplify installation, all components are on a single bus, with accessories connected to the network. The SectorFlex family of products provides a scalable solution that offers maximum flexibility and maximum coverage in any application – from a single room to a campus of buildings.

SECTOR RELAY CONTROLLER
• Controls non-Sector 0-10V ballasts or LED dimmers by other manufacturers
• Control a maximum of 70 ballasts within the same zone or individual ballast control

SECTOR NETWORK BUS CONTROLLER
• Contains the brain and power supply for the SectorFlex system in one component
• Controls a maximum of 64 devices on a system with the ability to expand a system to include a maximum of 253 systems
• Fast, easy installation

SECTOR NETWORK OCCUPANCY SENSORS
• Turns lights ON/OFF based on vacancy or occupancy
• Multi-technology and infrared models available
• Self-adjusting settings continuously analyze and adjust sensitivity, timer operation and long-term performance—reducing user complaints
• Fast, easy installation

SECTOR NETWORK PHOTOCELL
• Measures the amount of ambient light available in a space and lowers electric bills by reducing lighting usage when ambient light is sufficient
• Offers constant lighting at desired level for greater visual comfort
• Fast, easy installation

SECTOR NETWORK SWITCH
• Manually overrides programming at the push of a button to meet the user's needs
• Includes a 5-button (ON, MAX, BRIGHT, DIM, OFF) and a 2-button (ON, OFF) model
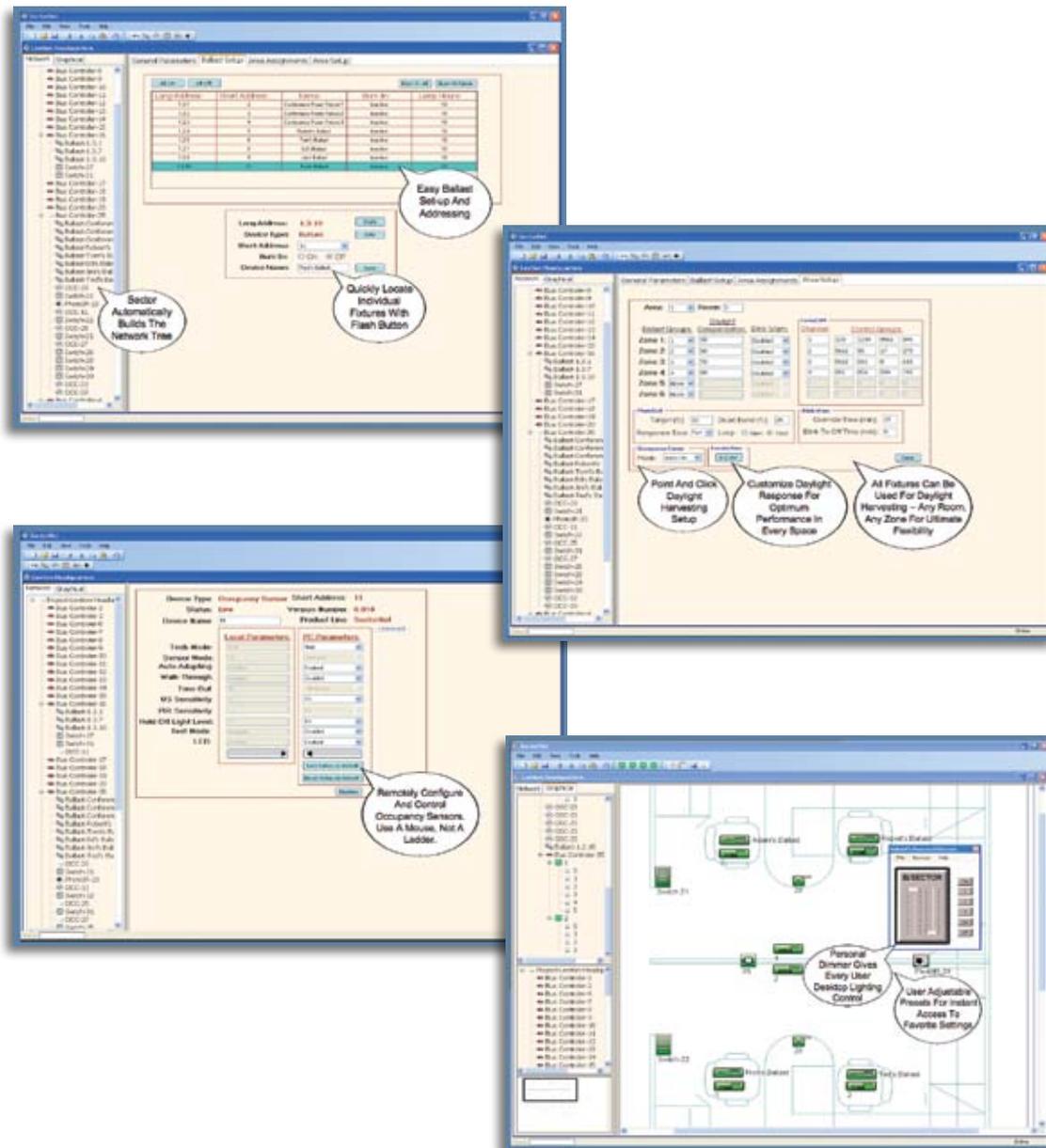• Fast, easy installation

SECTOR HANDHELD REMOTE
• Manually overrides programming at the push of a button to meet the user's needs (ON, MAX, BRIGHT, DIM, OFF)

SECTORNET SOFTWARE

• Personal Dimming Option (PDO): Individual control for the lights above a user's workspace right from their desktop PC

• Central control: Facility personnel can re-configure control as needed with drag-and-drop GUI interface with Illustrator layout tool

• Only need a computer to configure the system. Once the system is configured, SectorFlex will run itself without a computer connected.

• Remote configuration available

• Commissioning: Quickly associates fixtures to related controls

SERVICE AND SUPPORT DURING EVERY STEP OF THE PROCESS.

Only Leviton has the service and support to help you create a lighting control system that does exactly what you want it to do while saving electricity, meeting codes and standards, and even garnering rebates.

ASAP ONLINE LIGHTING CONTROL DESIGNER

Leviton's exclusive ASAP (online) point-and-click application **(www.leviton.com/ASAP)** allows you to quickly and simply design, specify, and enter orders for your lighting control projects. Create a complete submittal package in minutes and enjoy an unheard of seven-day turnaround time so you can deliver a complete lighting controls package to your customers in less time.

OCCUPANCY SENSOR LAYOUT SERVICE

Leviton's exclusive occupancy sensor layout services are now accessible online at **http://portal.leviton.com**. Submit requests and drawings for occupancy sensor layouts easily with Leviton's secure website portal. 3-5 business day turnaround time. Complete occupancy sensor layouts directly on CAD drawings, complete with a Bill of Materials. This unique service is available at no cost to you.

DOLLARS & SENSORS

Get a quick, accurate payback analysis on your occupancy sensors investment. Dollars & Sensors will do for you in minutes what it takes other programs to complete in a week. Stop wasting time and energy and let Leviton's Dollars & Sensors program do the analyses for you. Access at **www.leviton.com/dollarsandsensors**

EXCLUSIVE NO-COST KNOWLEDGEBASE AND SUPPORT FORUMS

communities.leviton.com

TECHNICAL SALES SPECIALIST TEAM

Leviton's Technical Sales Specialists are available for local support in most major markets to assist in design support and custom specifications for commercial, government and LEED projects. To arrange a personal visit from one of Leviton's Technical Sales Specialists contact **SpecSales@leviton.com**

FACTORY COMMISSIONING SERVICE

To insure that our products are operating correctly and with peak efficiency, the services of a Factory Authorized Technician to energize and commission the system are available. Our service includes verification of performance, basic instruction for the owner's personnel in system operation and maintenance, and validation of the warranty.

EXTENDED WARRANTY PROGRAM

In addition to our industry leading product warranties, we offer an extend warranty and service contract program that not only extends the life of the warranty but provides on-site service for Leviton systems

DEDICATED TECHNICAL SUPPORT

By phone at 800-959-6004
For more information on Leviton's exclusive design tools please visit **www.leviton.com/LESdesign**.

For more information on SectorFlex please visit **www.leviton/SectorFlex**.

LEVITON®

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