

# Smart Energy Saving and Code Compliant Solutions with Intellect™ Technology







# **Powering Next Generation Lighting**

Today's leading-edge lighting controls require more than just a switch that turns lighting on and off. Leviton Intellect technology delivers a simple, yet advanced room control solution that can meet the unique lighting needs for each space. Intellect allows customers to high performance lighting control strategies while meeting energy code requirements and qualifying for rebates.

This simple solution only requires the installation of a factory equipped Intellect-enabled fixture and Keypad Room Controller. Use the Bluetooth®-enabled Neuron App to configure, monitor, and control the system.

# Intelligent Fixture Control System System Features

- Programmable via any Bluetooth-enabled Android or iOS smart device using the Neuron App
- Compliant with DesignLights Consortium (DLC) specifications for Advanced Lighting Controls (certification pending)
- Multi-location switching
- Occupancy detection—minor motion coverage area is equivalent to fixture coverage area
  - Auto-ON/Auto-OFF —automatically turns the lights ON on occupancy, turns the lights OFF on vacancy
    - Restore Daylighting Target on occupancy
    - Restore Last Level on occupancy
    - Restore Fixed Level on occupancy
  - Manual-ON/Auto-OFF—upon occupancy, nothing happens, user must push a button or control the lights from the app to turn them on; turns the lights OFF on vacancy

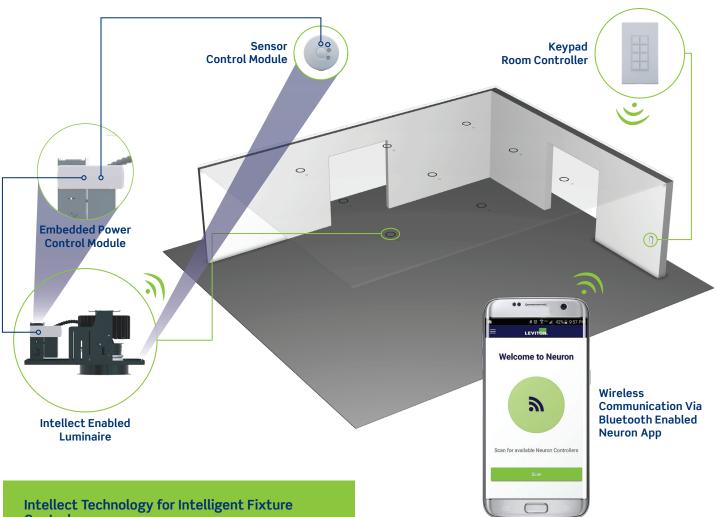
#### System Features (continued)

- Multi-zone daylight harvesting—no limit to number of zones
  - · Closed loop daylight harvesting
  - Configurable dead band
  - Room daylight harvesting has two operating modes
    - CAP at Target —lights will never go brighter than the programmed target level
    - Override Allowed —lights can temporarily override the daylighting target
      - When the lights are in override, they will remain so until the user puts them in daylighting mode again by pressing the "ON" button, the user adjusts the level, or the override timer expires
      - Upon expiration of the override timer, the lights will revert to the daylighting target value
      - Daylighting timer can be set from 1 minute to xx hours or to infinite
- Programmable Keypad Room Controller buttons assignable with one of the following behaviors
  - Scene—collection of Groups at a level
  - Toggle—button turns an individual group ON/OFF
  - Room ON—all lights go to their target level or to MAX if they are not in a daylighting zone
  - Room OFF—all lights go OFF
  - Raise—lights get incrementally brighter from their current position; lights that are off, stay off
  - Lower—lights get incrementally dimmer from their current position; lower will only dim the lights to their minimum value
- User controlled fixture Groups—no limit to number of Groups
- Integral scene support—scenes are collections of Groups, each at their own level, programmed with a fade time and recalled from a push button or the app

# **Intelligent Fixture Control System Diagram**

# **Smart and Simple Intellect-enabled Fixture** and Keypad Room Controller Installation

- 1. Simply install the factory equipped Intellect-enabled LED fixture provided by Intellect Partners
- Install the Keypad Room Controller Configure the system with the Leviton Neuron App and you're done!



# Controls

- Simplify energy management and code compliance
- Meet energy code requirements for IECC, ASHRAE 90.1 and Title 24
- Compliant with DesignLights Consortium (DLC) specifications for Advanced Lighting Controls (certification pending)
- Increase energy savings
- Optimize space functionality
- Improve the comfort of a space for occupants to work
- **Boost productivity**
- Configure, control and monitor the system from your smart device via the Neuron App

Note: Intellect-enabled fixtures provided by Intellect Partners. See Intellect Partners' fixtures data sheets and instruction sheets for specific wiring means and methods.



# The Intellect Components

#### ■ Intellect-enabled Fixtures

- Compatible with Leviton Intellect controls —assures that the fixture will seamlessly operate with other Intellectenabled devices and have a well defined feature set
- Out-of-the-box, pre-commissioning, power-up operation
  - Energy management and code compliant lighting control solution with dimming, occupancy/vacancy sensing, and basic daylight harvesting capabilities
- Any fixture can be Intellect-enabled by the fixture manufacturer
- Fixture manufacturer equipped with an Intellect Sensor Control Module (SCM) and Power Control Module (PCM)
  - Occupant detection for intended coverage area of the fixture
  - Light level detection
  - Detects occupancy, turns lights OFF when the space is unoccupied, and turns lights ON when the space is occupied
  - Automatically calibrated daylight harvesting
  - Energy usage data collection
    - Minimum requirement for metrology data is power factor corrected kWH; however, most fixtures track kWH, Power Factor, Voltage, KVAR, etc.
- Enables wireless communication with other Intellectenabled devices via a robust mesh network

## Intellect-enabled Fixtures (continued)

- Each fixture is independent (works together in Groups after commissioning)
- Dimmable fixtures
- Minimum and maximum trim adjustable
- Selectable dimmer curve
- Occupancy sensor or photocell may be disabled
- Indicator discreetly flashes when occupancy is detected; may be disabled
- Occupancy sensitivity may be adjusted for each fixture or for the space as a whole

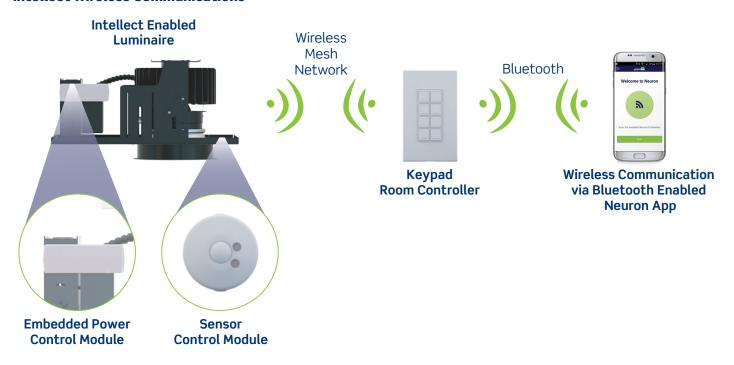
# Keypad Room Controller

- Acts as the primary user interface and coordinates all the energy management functions within the space
- Provides the Bluetooth interface for connection to the Neuron App via an Android or iOS smart device
- Uses the Neuron App to configure button operation to meet the unique lighting needs of each space

#### Leviton Bluetooth-enabled Neuron App

- Wirelessly communicates to the Keypad Room Controller via Bluetooth to configure control and monitor the system
- Enables dimming, occupancy/vacancy sensing, multi-zone daylight harvesting, manual control, and scene capabilities

# **Intellect Wireless Communications**





**Keypad Room Controller Ordering Information** 

Cat. No.	Description
DLDNK-01W	Decora 1-Button multi-function BLE keypad with room controller, 120-277VAC, 50/60Hz, White
DLDNK-02W	Decora 2-Button multi-function BLE keypad with room controller, 120-277VAC, 50/60Hz, White
DLDNK-04W	Decora 4-Button multi-function BLE keypad with room controller, 120-277VAC, 50/60Hz, White
DLDNK-08W	Decora 8-Button multi-function BLE keypad with room controller, 120-277VAC, 50/60Hz, White

Find Intellect Partners and Intellect-enabled fixture ordering information at Leviton.com/Intellect.

If the fixture manufacturer you're looking for is currently not an Intellect Partner, contact us at **EMCAmarketing@leviton.com**.

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