

## Casambi Ecosystem Products: Lighting Controls

**Zone Controller**

Casambi Ready 0-10v Room Controller  
Casambi Mesh Room Controller, 120-277 Volt with dimming, 12V aux. Sensor input, Power Metering, 16A Relay

- 100-277VAC Input Voltage
- 0-10v Output to LED Driver
- Relay with Zero-Crossing
- Active High Output for Relay Drive
- 12V aux Power (PSC-WCM-450-BLE-CB)

**Tunable White Controller**

**CBU-A2D**  
Bluetooth controllable 2ch 0-10V/DALI controller

CBU-A2D is a Bluetooth controllable, Casambi enabled 2 channel 0-10V/DALI controller. CBU-A2D has a universal 100-277VAC input voltage range.

CBU-A2D can control one or two 0-10V controllable LED drivers, or it can control a tunable white LED driver with two 0-10V control interfaces. The product can also be configured into a DALI mode when it can be connected to a DALI LED driver or DALI sensor for presence and/or daylight harvesting functions.

**Tunable White**

**0-10v Fixture Controller**

**CBU-ARP**  
Bluetooth controllable 0-10v controller with relay

CBU-ARP is a Bluetooth controllable, Casambi enabled one channel 0-10v controller with built-in 2.5 A relay and a motion sensor input.

CBU-ARP is designed to control a single 0-10V LED driver. If the LED driver cannot be turned completely off from the 0-10V control interface, CBU-ARP has a built-in 2.5 A relay for cutting the power from the driver. It also has a 12-24VDC input for motion sensor. The sensor must be powered by an external power supply such as mains voltage or auxiliary voltage from an LED driver. The 0-10V output can also be configured as DALI interface which allows for much richer feature set, such as controlling multi-channel LED driver (up to five channels) and reading diagnostic information from the driver.

**Single ch. 0-10v (w/ relay)**

## Casambi Ecosystem Products: Switches & Sensors

**PIR OCC/VCC Sensor**

Casambi Read Low Voltage PIR Sensor  
Casambi Mesh PIR Ceiling Mount Occupancy Sensor, 12-24VDC

- Quad Element PIR sensor
- LED Motion indicator
- Active High/Low outputs for Relay drive
- Mounting height up to 12ft (3.6m)
- 360° coverage pattern
- Bluetooth add-on enables remote sensor programming with greater customization time delay

**PIR Wide View/Hallway Sensor**

Casambi Ready Low Voltage Daylight Sensor  
Photodiode Sensor with BLE Compliant output

**FEATURES**

- Communication Protocol - Bluetooth 5.0
- Measuring range - 0-100 ft
- Input Power - 12-24VDC, 40mA Max
- Operating Temperature - -20°C to +55°C

**Kinetic Switch**

Casambi enabled EnOcean Kinetic Switches  
Bluetooth BLE Single or Double Rocker Wireless Switch - White (more colors available)

- Mount switches anywhere
- Create 3-way and 4-way switches
- Control lights, monitors, or other electrical loads
- Reconfigure or relocate as needed

## Code Compliance

C405.2.1.3	Occupancy Sensors in Open Office
C405.2.2	Timeswitch Controls
C405.2.1.1.2	Manual or Partial On
C405.3	Light Reduction Controls
C405.2.4	Daylight Responsive Control

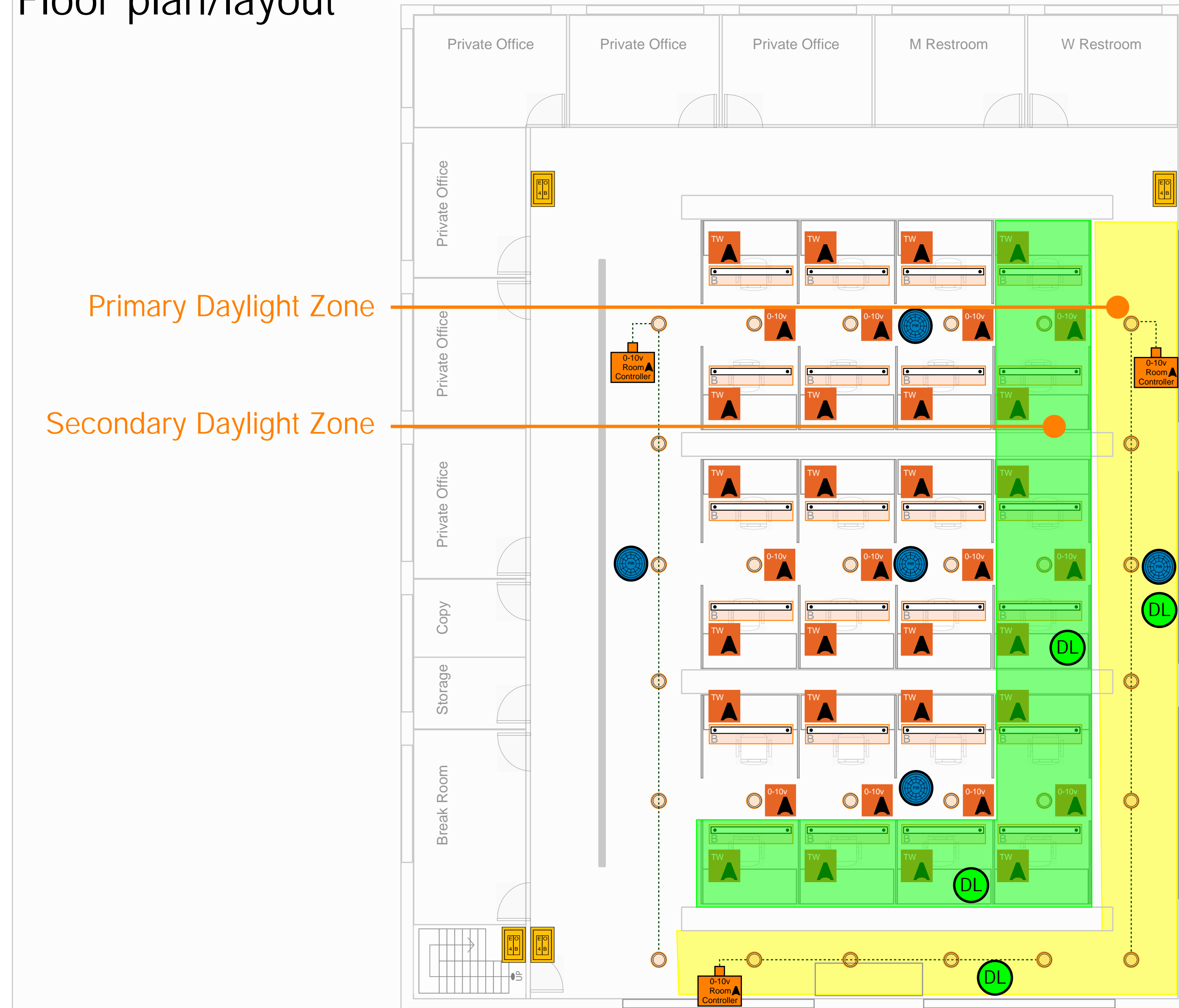
## Design Considerations

1. Fixture Level Control in Open Office area allows for maximum flexibility of Lighting Design
2. OCC for granular groups/zones configured via software
3. Zone Controllers for Corridors/Perimeter zones that do not need Fixture Level Control.
4. Primary & Secondary Daylight Zones/Groups created via Casambi App

## Sequence of Operations Example:

1. Auto-on based on Timer/Schedule
2. Auto-off in granular groups/zones via OCC Sensor
3. Reconfigure Open Office Space/Zones/Groups on the fly
4. Light reduction/Auto-off via OCC/VCC in Corridors.
5. Daylight Harvesting and Adjustment via Daylight Sensors

## Floor plan/layout



## Applications

**Daylighting**

Programmable Daylight Harvesting Sensors to control Fixtures/Zones/Groups/Scenes

**Tunable White**

Adjust Red/Green/Blue/White channels on RGBW Fixtures for use in Scenes/Buttons/Sensors/Timers

**Calendar & Timer**

Control Scenes, Groups, Fixtures, Sensors & More based on the Time of Day, Day of the week, or time of the year.

**OCC/VAC**

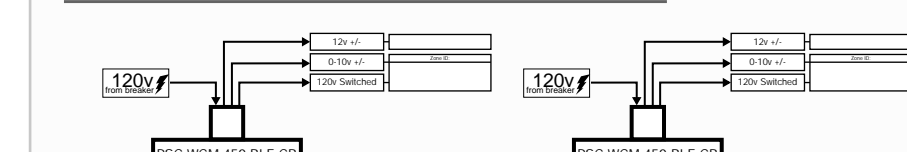
Programmable OCC and VAC sensors to control Fixtures/Zones/Groups/Scenes

**Luminaire Level Control**

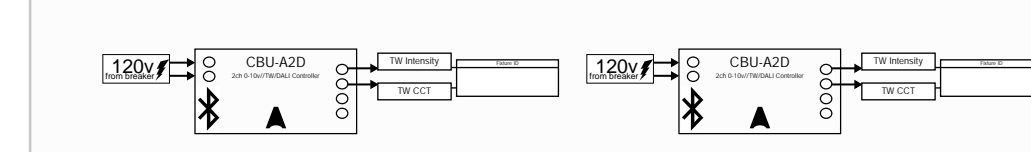
Luminaire Level Lighting Control  
Individual control of each lighting fixture for granular control of scenes and groups all via the software (no need to re-wire)

## Single-Line

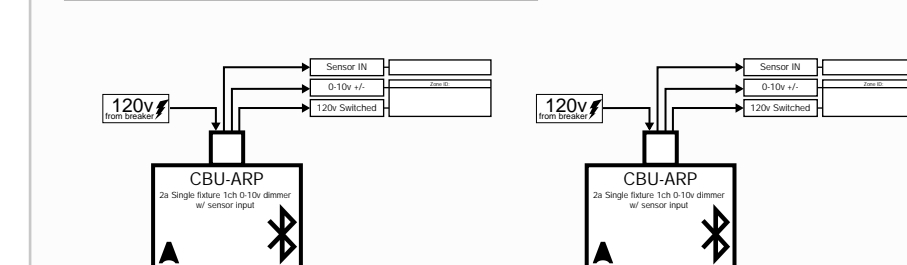
### Perimeters - 0-10v Zone



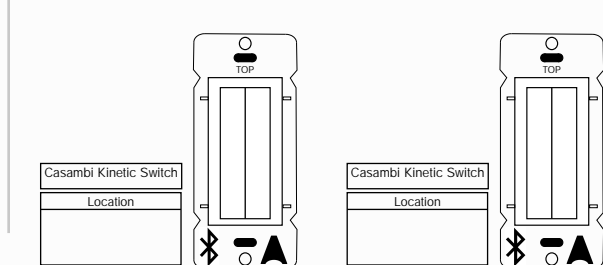
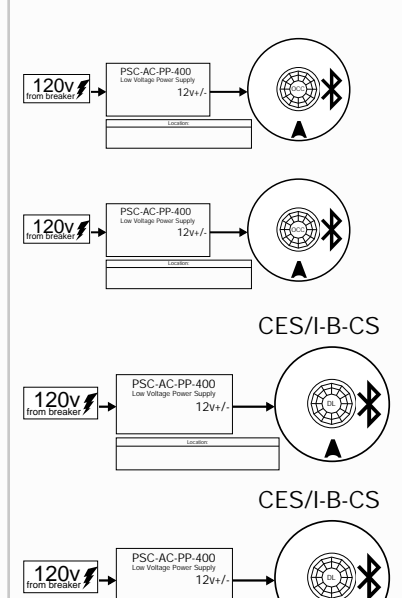
### Tunable White - Fixture Control



### 0-10v - Fixture Control



### Sensors & Switches



## Detailed Wiring

**0-10v Dimming w/ 2 Ch.**

**PSC-WCM-450-BLE-CB 1ch Single Channel 0-10v w/ HV Switch Leg & 24V Aux Output (Zone Control)**

**Typical PIR LV Sensor w/ Power pack supply**  
PSC-ND4-CM-DC-BLE-CB & PSC-AC-PP-400

**Wall mount Side View Hallway PIR Sensor (SWX-402-1-CB) & Power Supply (PSC-AC-PP-400)**

**CBU-ARP w/ HV Switch Leg 0-10v Single Channel**