Lighting Controls

OMNI® LOW VOLTAGE ULTRASONIC CEILING SENSOR
CEILING MOUNT OCCUPANCY SENSORS

FEATURES

- IntelliDAPT® self-adaptive technology - no manual adjustment required
- Superior all-digital ultrasonic (US) minor motion detection
- Non-volatile memory for sensor settings
- 500–2,000 square-foot coverage area (depending on model)
- Optional relay and photocell control
- UL and cUL listed
- California Title 24 compliant
- Five-year limited warranty

SPECIFICATIONS

CONSTRUCTION
- Casing- rugged, high-impact, injection-molded plastic KJB ABS
- Cycolac (UL-945VA) flame class rating, UV inhibitors
- Color-coded leads are 6" long (152.4 mm)
- 5.0 oz (142g)
- Off-white
- Green-ultrasonic detection

MOUNTING
- Mounting base provided
- Recommended mounting height: 8ft (2.44m) with a max mounting height of 12ft (3.66m)

ELECTRICAL
- OMNIUS500: 40kHz output
- OMNIUS2000: 32kHz output
- 24VDC, 33mA (uses UVPP and MP- Series power pack- not included)
- 24VDC active high-logic control signal with short circuit protection and optional dry contact (see RP options)

OPERATIONS
- IntelliDAPT
  - Auto reset from test setting
  - Self-adjusting timer
  - Self-adjusting ultrasonic thresholds
  - Automatic false-ON/false-OFF corrections
- Coverage
  - 500–2,000 square feet (depending on model)
- Timer Settings
  - Automatic mode: 8–30 min. (self-adjusts based on occupancy)
  - Test mode: 8 seconds (for an easy check at installation)
- RP Option
  - Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24VDC; three-wire isolated relay
  - Photocell: adjustable natural-light override ranges from 0 to
  - 100 foot-candles (0–1,000 lux)

OPERATING ENVIRONMENT
- Indoor use only
- Operating temperature: 32° to 104°F (0° to 40°C)
- Relative humidity (non-condensing): 0% to 95%

CERTIFICATIONS
- UL and cUL listed
- This product qualifies as "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 5/27/2020.

WARRANTY
- 5 year warranty

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ORDERING GUIDE

Example: OMNIUS2000RP-T

CATALOG #

OMNI	US			–	TAA			*Buy American Solutions		
Series	Technology	Coverage	Relay/Photocell Option					**TAA** FAR §52.225-11		
OMNI	US Ultrasonic	**500** 500 sq. ft.	**RP** Relay & Photocell		Blank Standard Product			OMNIUS2000RP		
		2000 2,000 sq. ft	**(Blank)** No Option		T TAA					

DIMENSIONS

4.50±.02"

1.50±.02"

6" WIRE LEADS
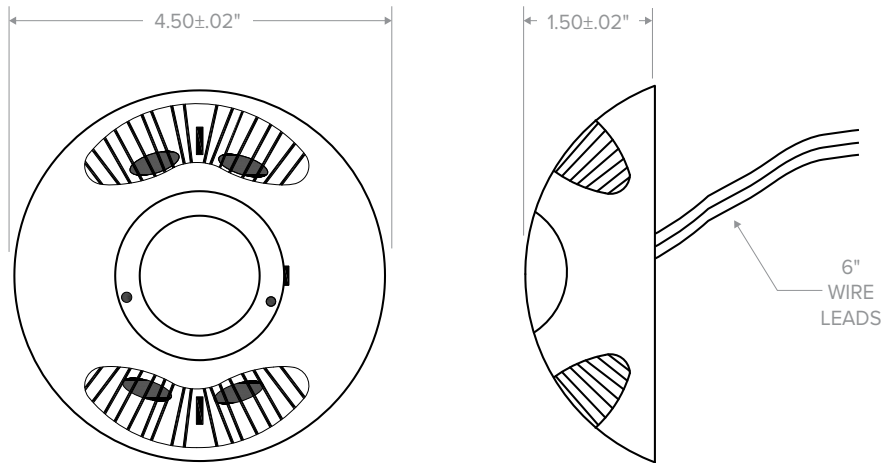
ADDITIONAL INFORMATION

Coverage Patterns

US 500 Range
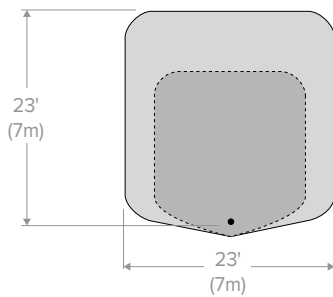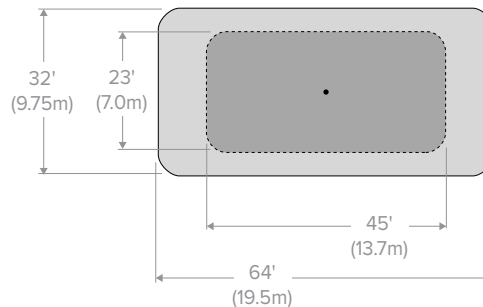
23' (7m)

23' (7m)

Minor Motion
Major Motion

US 2000 Range

32' (9.75m)

23' (7.0m)

45' (13.7m)

64' (19.5m)

Minor Motion
Major Motion

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ADDITIONAL INFORMATION (CONTINUED)

Wiring Diagrams

Ground
Neutral
Hot

Lighting Load

Override Switch (optional)

Power Pack contacts rated for 20 Amps.

Red
Red
Black
White

Red (+24VDC)
Black (common)
Blue (control)

Red
Black
Blue

UVPP Power Pack
Supplies 150mA
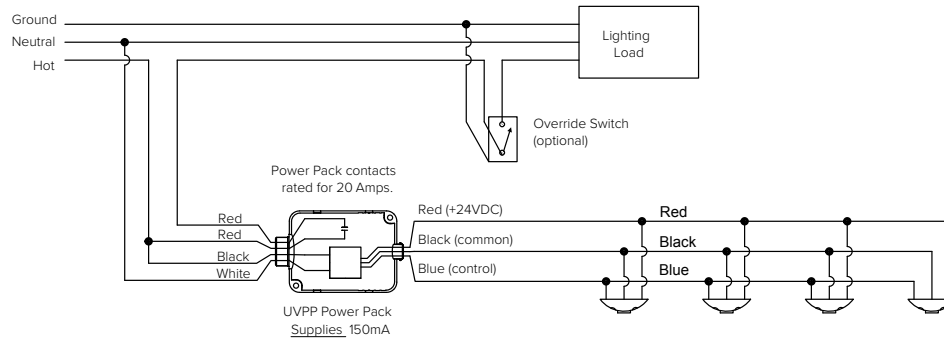
Low Voltage Sensors (devices)
Requires 33mA each

NOTE:

1. DO NOT attempt to power more than 4 devices, be it sensors or slave packs, from a single power pack.

1 Circuit with up to 4 Sensors and UVPP

Ground
Neutral
Hot

Lighting Load

Override Switch (optional)

Power Pack contacts rated for 20 Amps.

Red
Red
Black
White

Red (+24VDC)
Black (common)
Blue (control)

UVPP Power Pack
Supplies 150mA

Red (+24VDC)
Black (common)
Blue (control)
Pink (control + photocell)
Blue/White (Relay Common)
Black/White (Relay Normally Closed)
Yellow/White (Relay Normally Open)

Omni or LightOWL sensors with -RP option

Blue/White (Relay Common)
Black/White (Relay Normally Closed)
Yellow/White (Relay Normally Open)

RP option Relay detail

-Sensor not powered
-No occupancy

Blue/White (Relay Common)
Black/White (Relay Normally Closed)
Yellow/White (Relay Normally Open)

-Occupancy detected

1 Circuit with RP Option Wiring

Pink wire replaces previous gray wire. Units with a gray instead of pink wire should be wired as the pink wire shown in the diagram.

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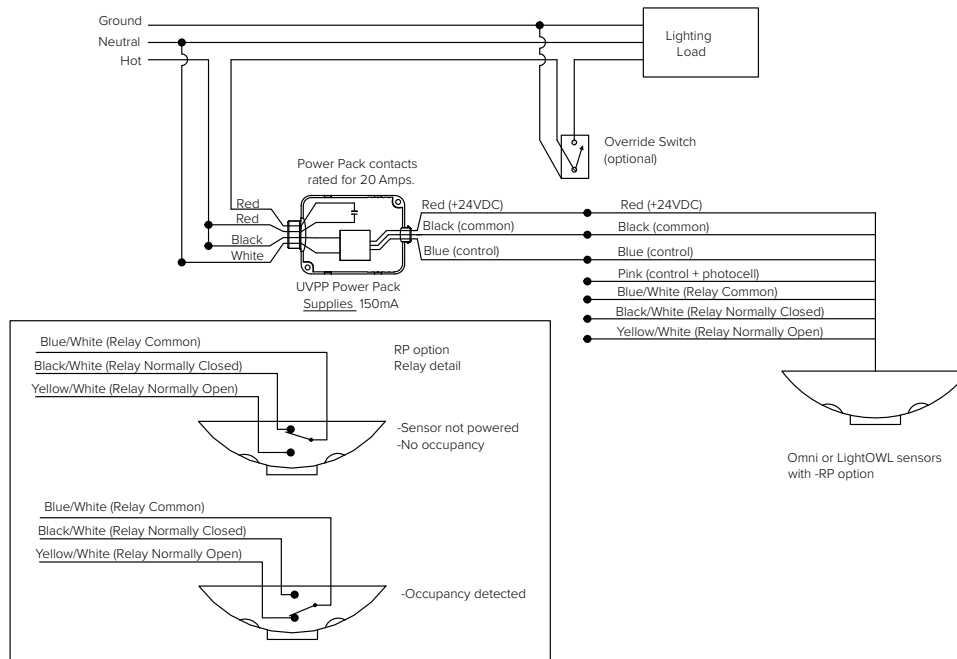
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ADDITIONAL INFORMATION (CONTINUED)

Wiring Diagrams

Ground
Neutral
Hot

Lighting Circuit 1

DO NOT connect the Red Low Voltage wires together between power packs.

Power Pack contacts rated for 20 Amps.

Red
Red
Black
White

Red (+24VDC)
Black (common)
Blue (control)

UVPP Power Pack
Supplies 150mA

Ground
Neutral
Hot

Lighting Circuit 2

Low Voltage Sensors (devices)
Requires 33mA each

Power Pack contacts rated for 20 Amps.

Red
Red
Black
White

Red (+24VDC)
Black (common)
Blue (control)

UVPP Power Pack
Supplies 150mA
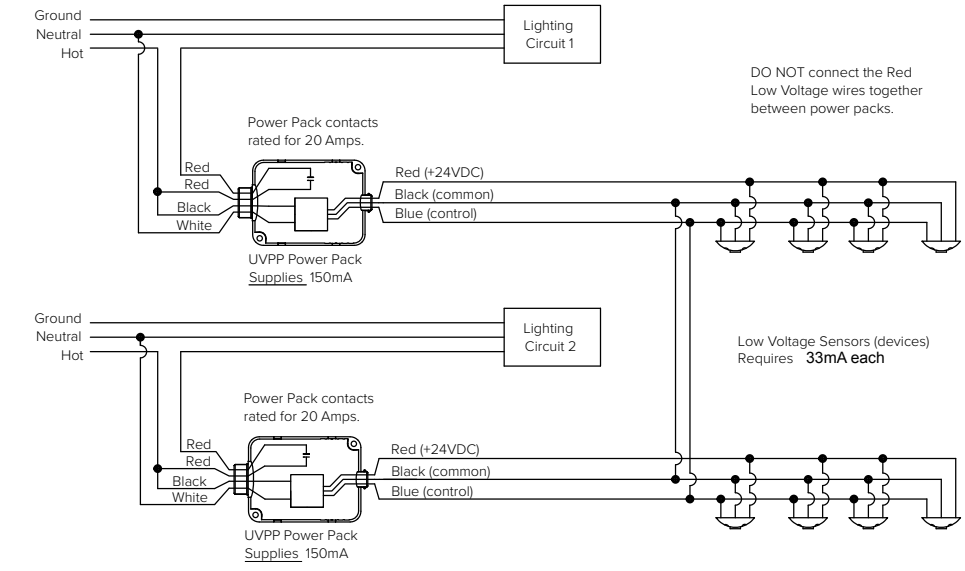
NOTES:

1. Lighting load turns on when at least one sensor detects motion
2. DO NOT attempt to power more than 4 devices, be it sensors or slave packs, from a single power pack
3. No more than 4 power packs should be connected in this way

2 Circuits with 5 to 8 Sensors

Current 📷

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