

WaveLinx Wireless Controls

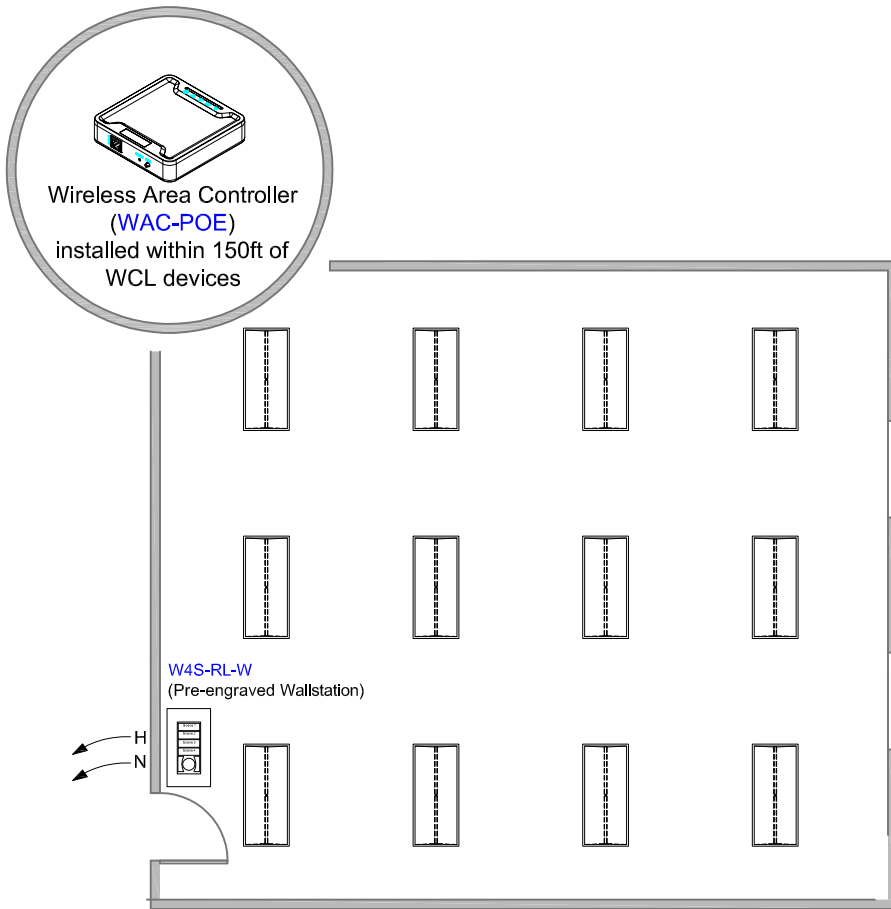
IECC 2015 DESIGN GUIDE

CLASSROOM WITH 0-10V DIMMING



www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE & LOWER
- ALL OFF

ADDITIONAL FEATURES

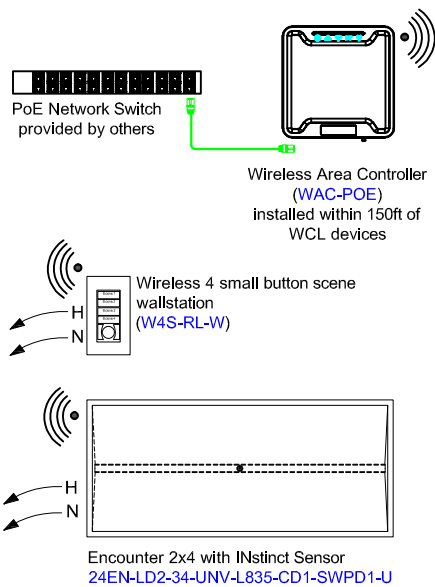
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
12	24EN-LD2-34-UNV-L835-CD1-SWPD1-U	Encounter 2x4 with INstinct Sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



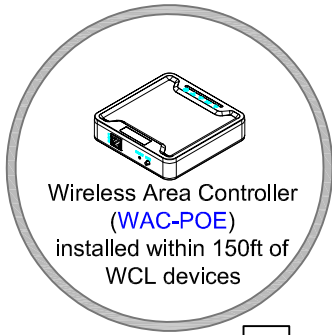
WaveLinx Wireless Controls

IECC 2015 DESIGN GUIDE

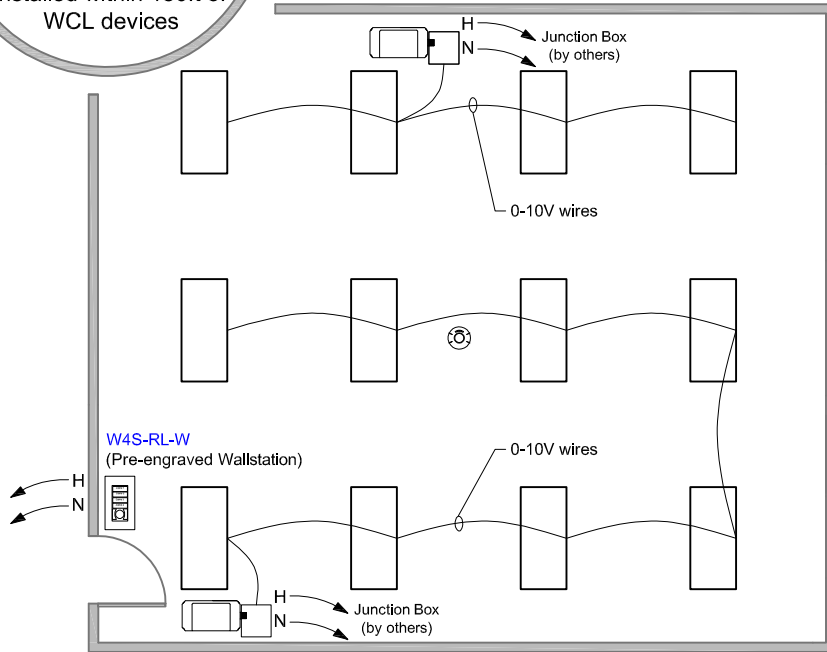
CLASSROOM SWITCHPACK WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



Wireless Area Controller (WAC-POE) installed within 150ft of WCL devices



Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
2	WSP-MV-010	20A relay with 0-10V dimming
1	CWPD-1500	WaveLinx ceiling occupancy sensor

SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

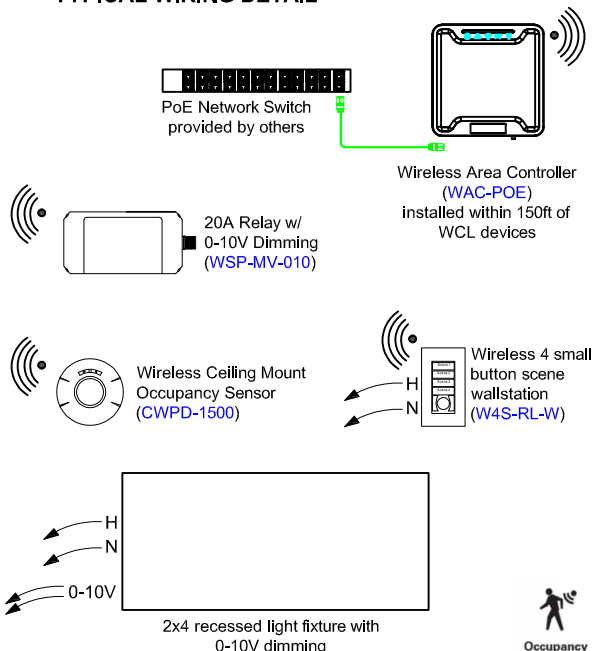
MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP
- **UL2900-1 LISTED FOR NETWORK CYBERSECURITY**

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

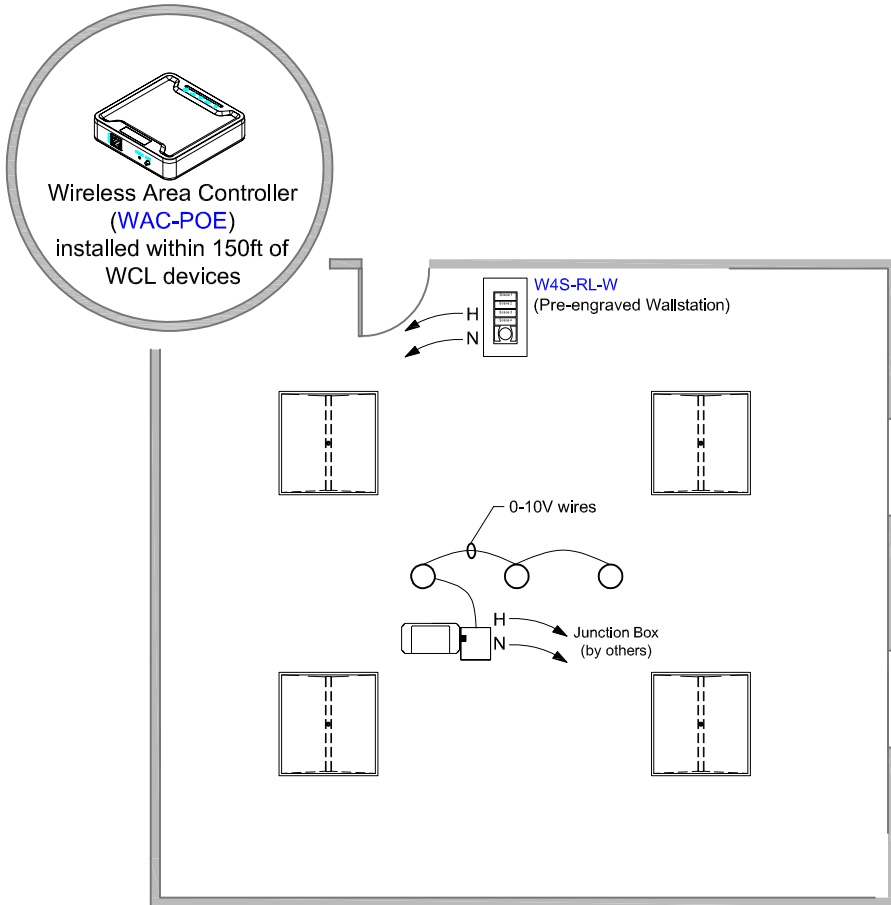


WaveLinx Wireless Controls

IECC 2015 DESIGN GUIDE
CONFERENCE ROOM WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

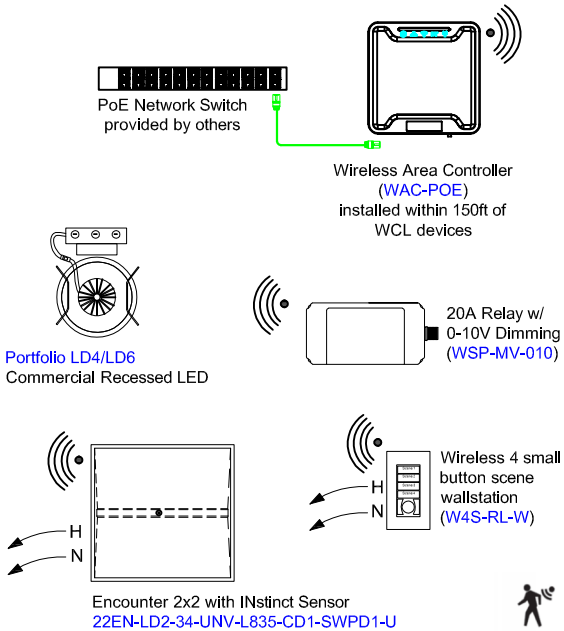
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
1	WSP-MV-010	20A relay with 0-10V dimming
3	LD4 or LD6	Portfolio Commercial Recessed LED
4	22EN-LD2-34-UNV-L835-CD1-SWPD1-U	Encounter 2x2 with INstinct Sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16



WaveLinx Wireless Controls

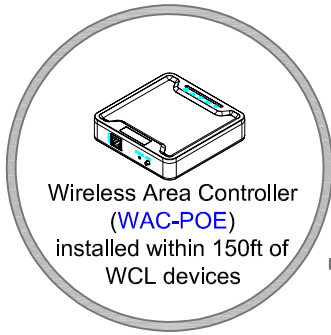
IECC 2015 DESIGN GUIDE

CONFERENCE ROOM SWITCHPACK

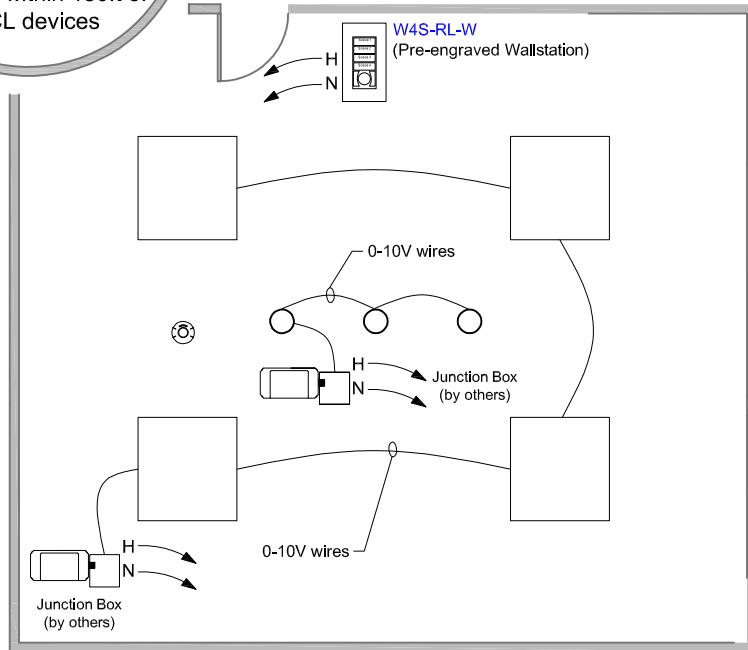
WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



Wireless Area Controller (WAC-POE) installed within 150ft of WCL devices



Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
2	WSP-MV-010	20A relay with 0-10V dimming
1	CWPD-1500	WaveLinx ceiling occupancy sensor

SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

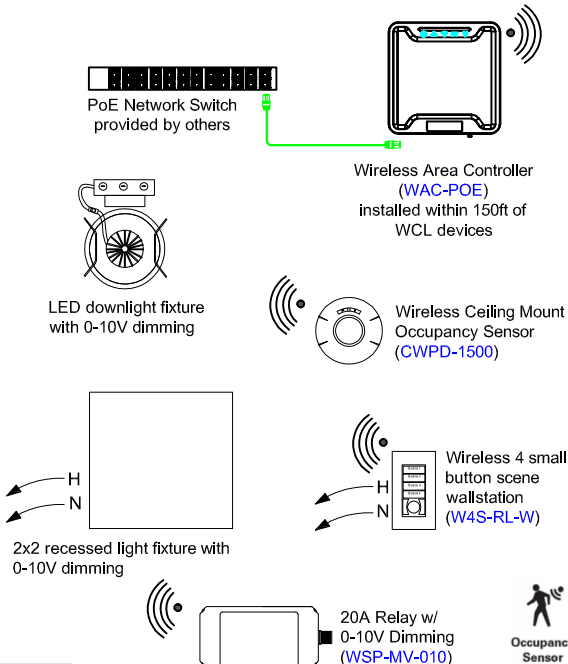
MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP
- **UL2900-1 LISTED FOR NETWORK CYBERSECURITY**

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



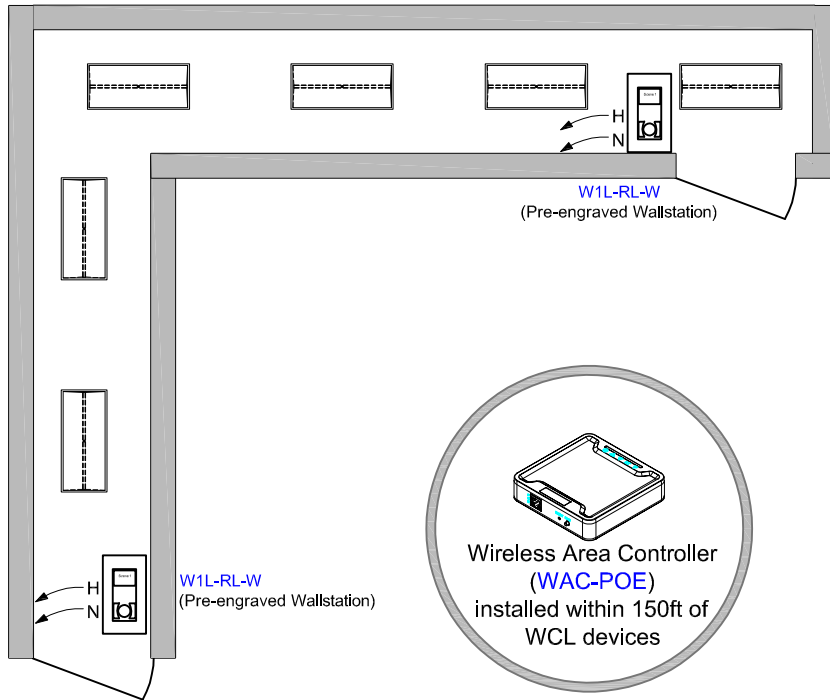
WaveLinx Wireless Controls

IECC 2015 DESIGN GUIDE

CORRIDOR WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

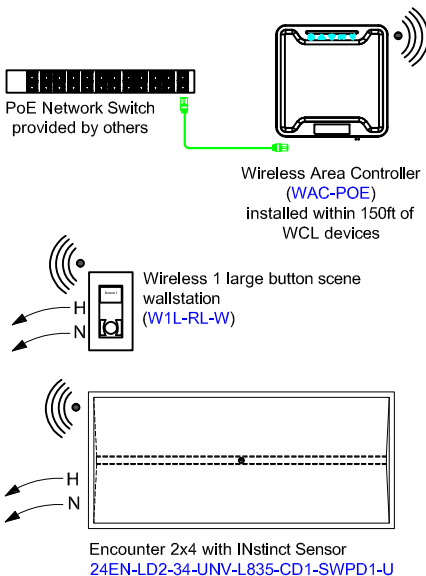
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
2	W1L-RL-W	1 Large button scene wallstation
6	24EN-LD2-34-UNV-L835-CD1-SWPD1-U	Encounter 2x4 with INstinct Sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



WaveLinx Wireless Controls

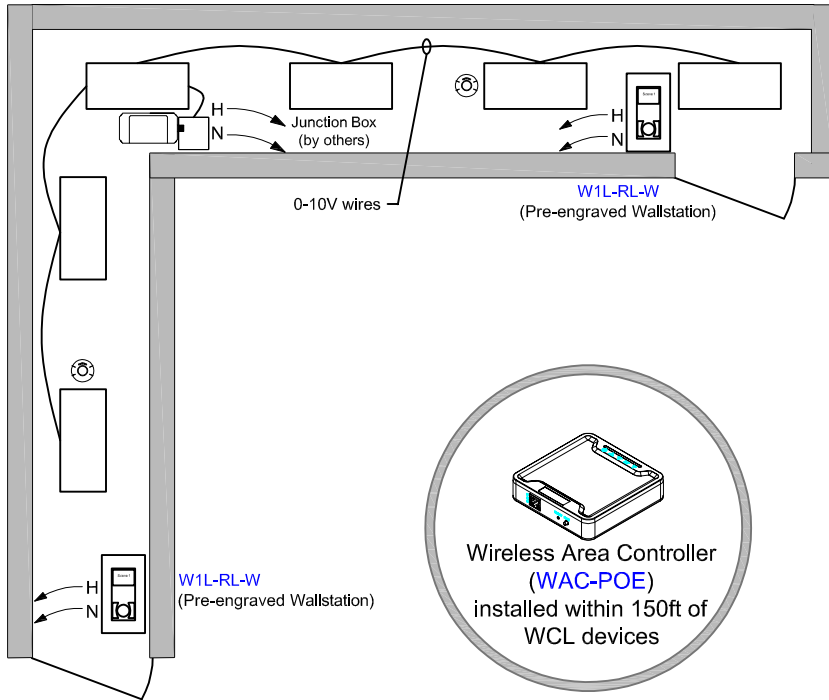
IECC 2015 DESIGN GUIDE

CORRIDOR SWITCHPACK WITH

0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

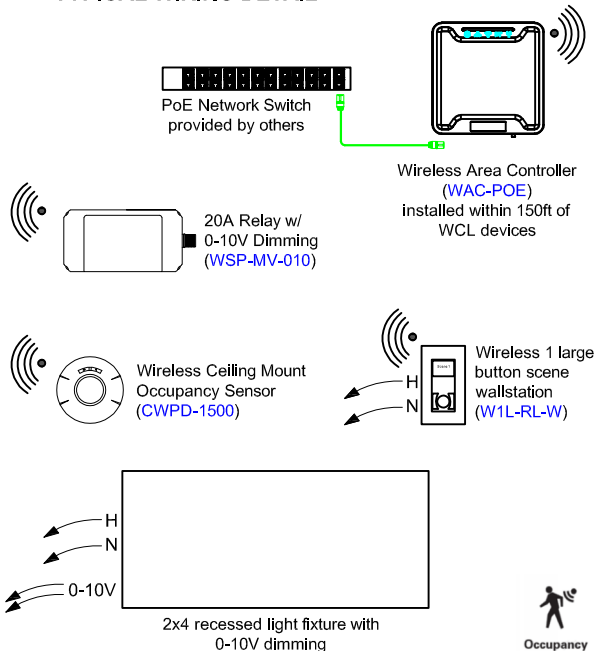
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
2	W1L-RL-W	1 Large button scene wallstation
1	WSP-MV-010	20A relay with 0-10V dimming
2	CWPD-1500	WaveLinx ceiling occupancy sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



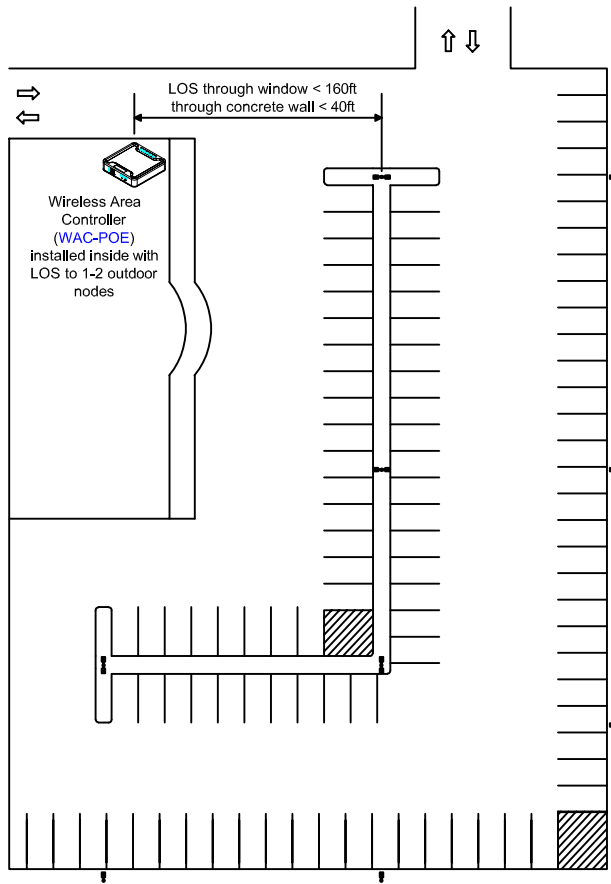
WaveLinx Wireless Controls

IECC 2015 DESIGN GUIDE

EXTERIOR LIGHTING WITH WIRELESS CONTROLS

www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

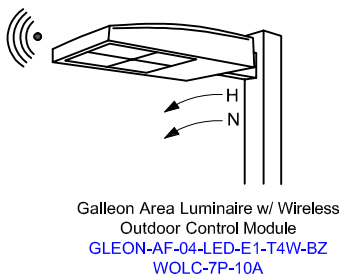
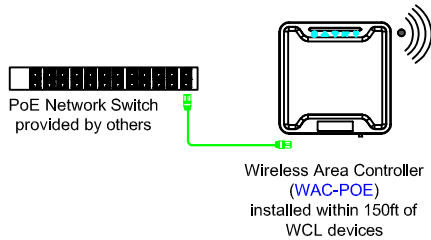
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
13	WOLC-7P-10A	WaveLinx Outdoor Control Module
8	GLEON-AF-04-LED-E1-5MQ-BZ	Galleon LED Area/Site Luminaire
5	GLEON-AF-04-LED-E1-T4W-BZ	Galleon LED Area/Site Luminaire

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice (SWPD4/SWPD5):	Best Practice (WOLC-7P-10A):
Gateway/WAC to 1st Fixture	40ft (concrete)/ 160ft (LOS window)	200ft (LOS window)
Number of interior walls	LOS through window	LOS through window
Distance between Hops	160 feet LOS	200 feet LOS
Number of Hops	10 hops	10 hops



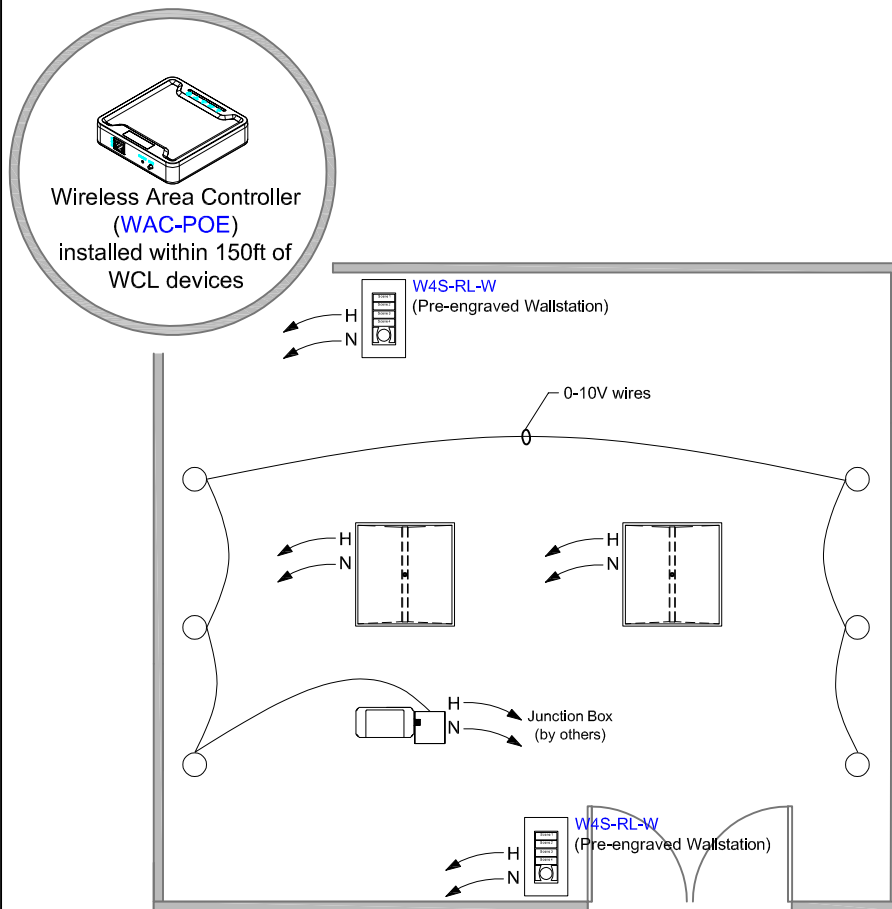
WaveLinx Wireless Controls

IECC 2015 DESIGN GUIDE

LOBBY WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE & LOWER
- ALL OFF

ADDITIONAL FEATURES

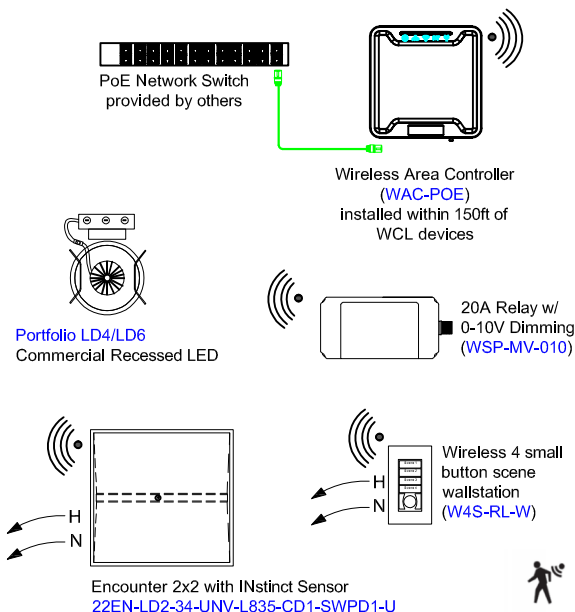
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
2	W4S-RL-W	4 Small button scene wallstation
1	WSP-MV-010	20A relay with 0-10V dimming
6	LD4 or LD6	Portfolio Commercial Recessed LED
2	22EN-LD2-34-UNV-L835-CD1-SWPD1-U	Encounter 2x2 with INstinct Sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16



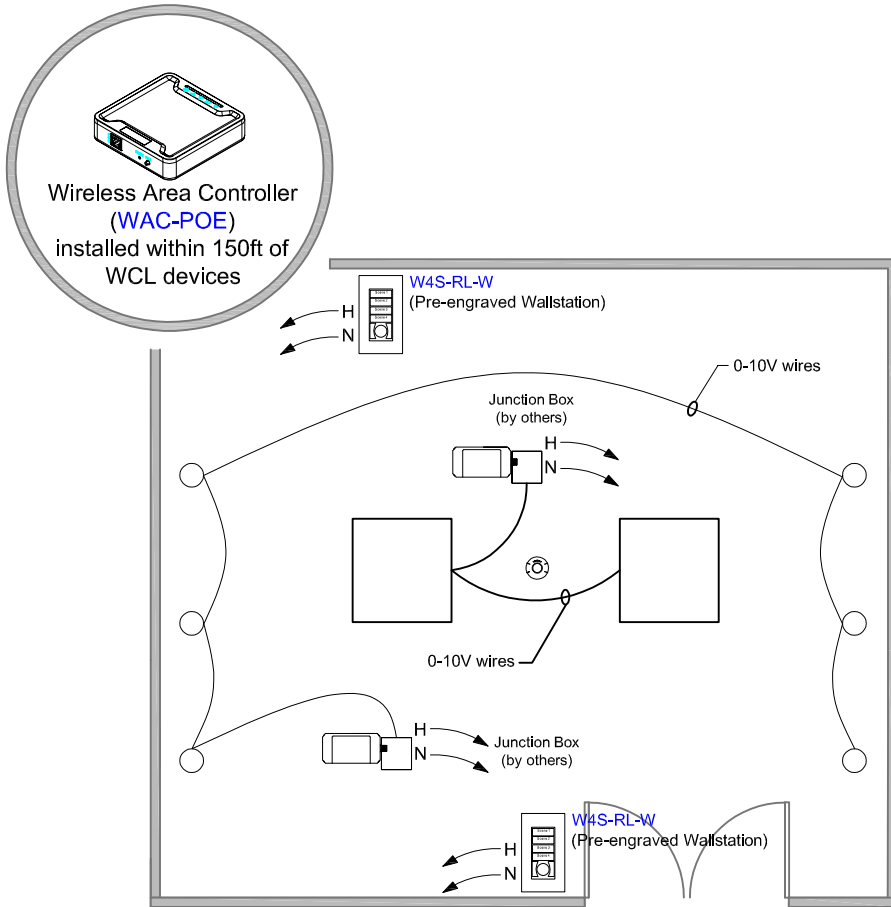
WaveLinx Wireless Controls

IECC 2015 DESIGN GUIDE

LOBBY SWITCHPACK WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE & LOWER
- ALL OFF

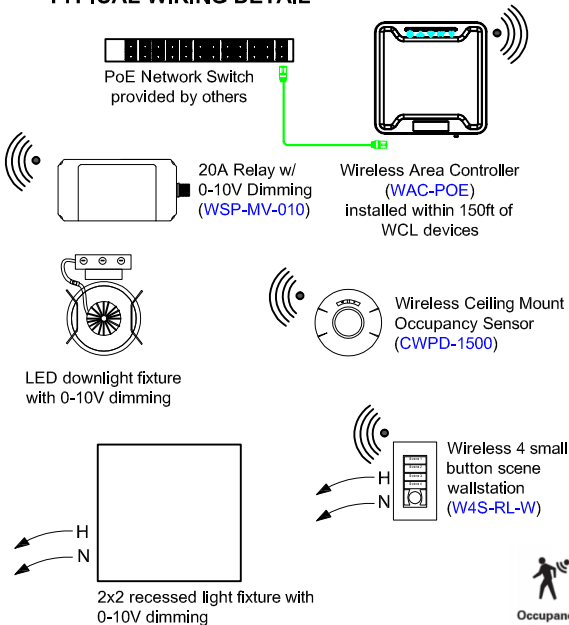
ADDITIONAL FEATURES

- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP
- **UL2900-1 LISTED FOR NETWORK CYBERSECURITY**

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
2	W4S-RL-W	4 Small button scene wallstation
2	WSP-MV-010	20A relay with 0-10V dimming
1	CWPD-1500	WaveLinx ceiling occupancy sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16



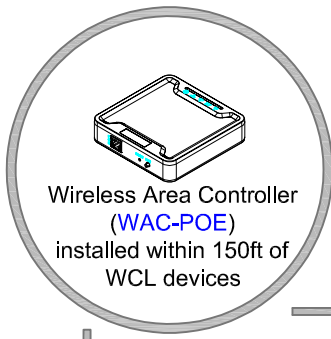
WaveLinx Wireless Controls

IECC 2015 DESIGN GUIDE

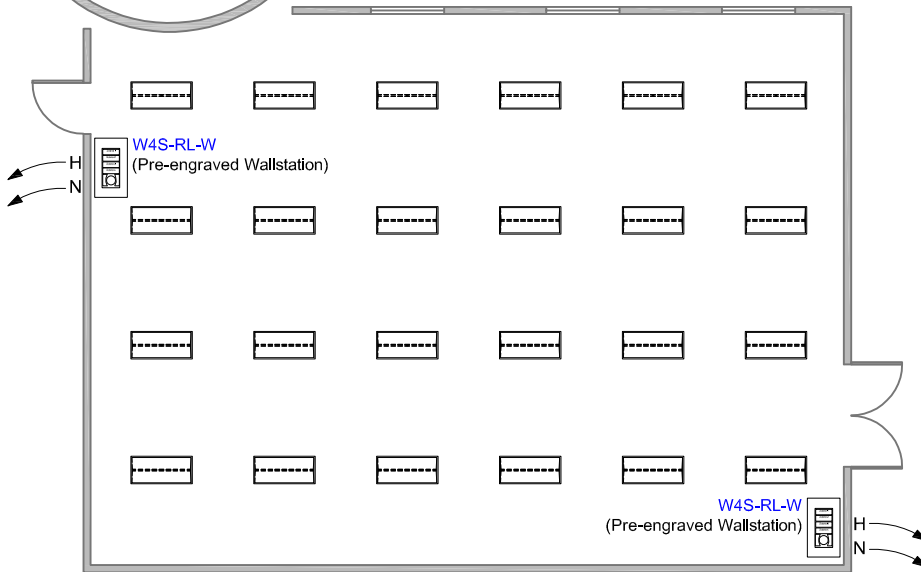
OPEN OFFICE WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



Wireless Area Controller (WAC-POE) installed within 150ft of WCL devices



SEQUENCE OF OPERATIONS

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE & LOWER
- ALL OFF

ADDITIONAL FEATURES

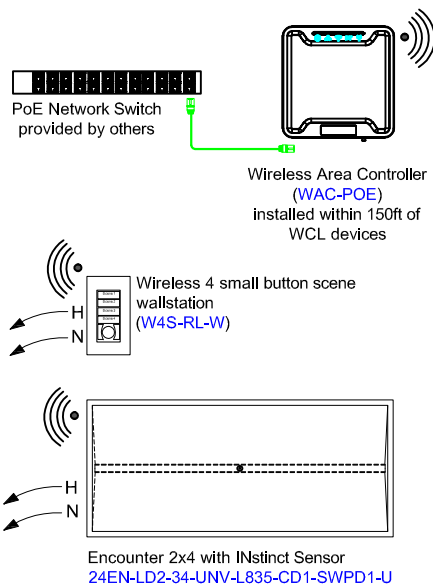
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
2	W4S-RL-W	1 Large button scene wallstation
24	24EN-LD2-34-UNV-L835-CD1-SWPD1-U	Encounter 2x4 with INstinct Sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16



WaveLinx Wireless Controls

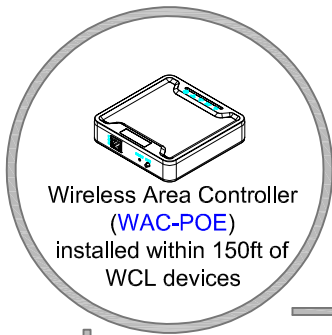
IECC 2015 DESIGN GUIDE

OPEN OFFICE SWITCHPACK

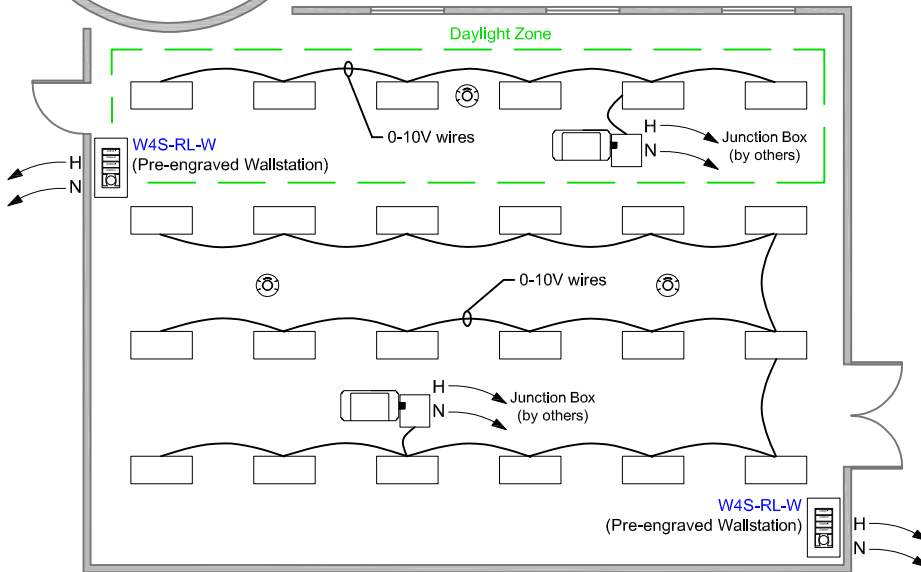
WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



Wireless Area Controller (WAC-POE) installed within 150ft of WCL devices



SEQUENCE OF OPERATIONS

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE & LOWER
- ALL OFF

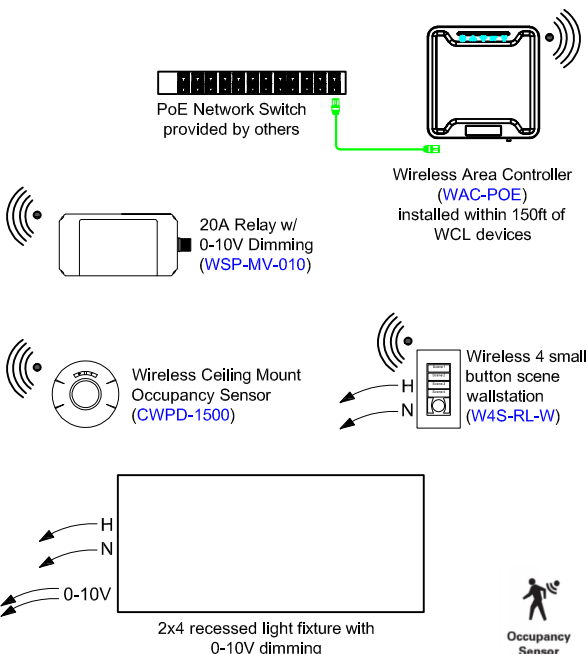
ADDITIONAL FEATURES

- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP
- **UL2900-1 LISTED FOR NETWORK CYBERSECURITY**

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
2	W4S-RL-W	4 Small button scene wallstation
2	WSP-MV-010	20A relay with 0-10V dimming
3	CWPD-1500	WaveLinx ceiling occupancy sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



WaveLinx Wireless Controls

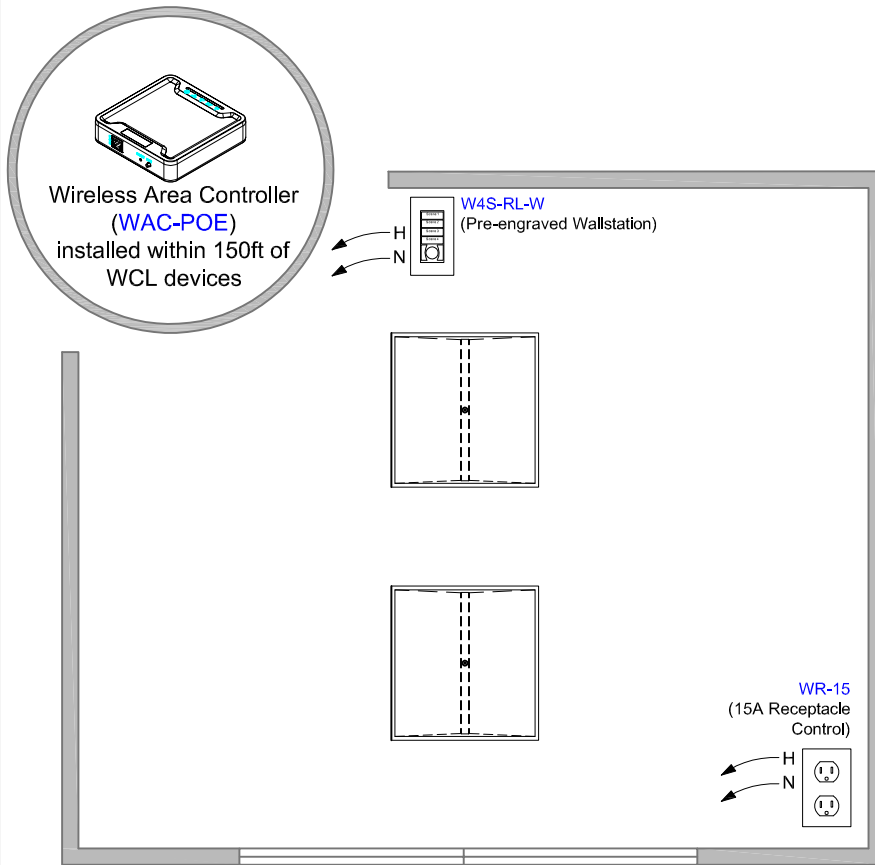
IECC 2015 DESIGN GUIDE

PRIVATE OFFICE WITH 0-10V DIMMING



www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

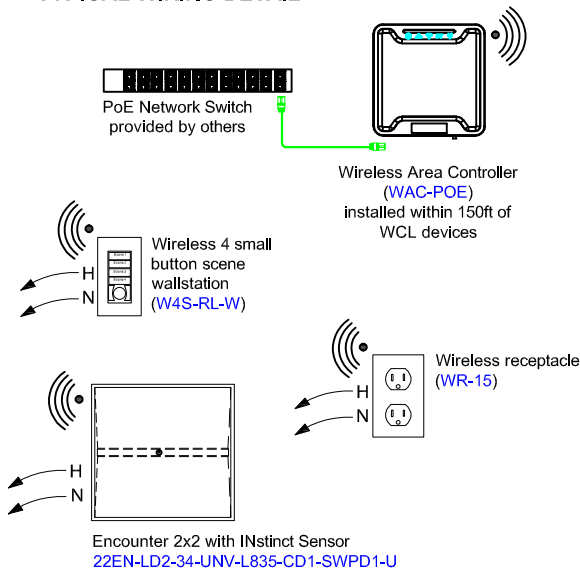
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
1	WR-15	Wavelinx Receptacle
2	22EN-LD2-34-UNV-L835-CD1-SWPD1-U	Encounter 2x2 with INstinct Sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



Occupancy Sensor



Daylighting Control



Manual On/Auto Off



Tuning Control



Manually Switched ON/OFF



Manual Dimmer



Receptacle Control



Lumen Maintenance Control



Demand Response

WaveLinx Wireless Controls

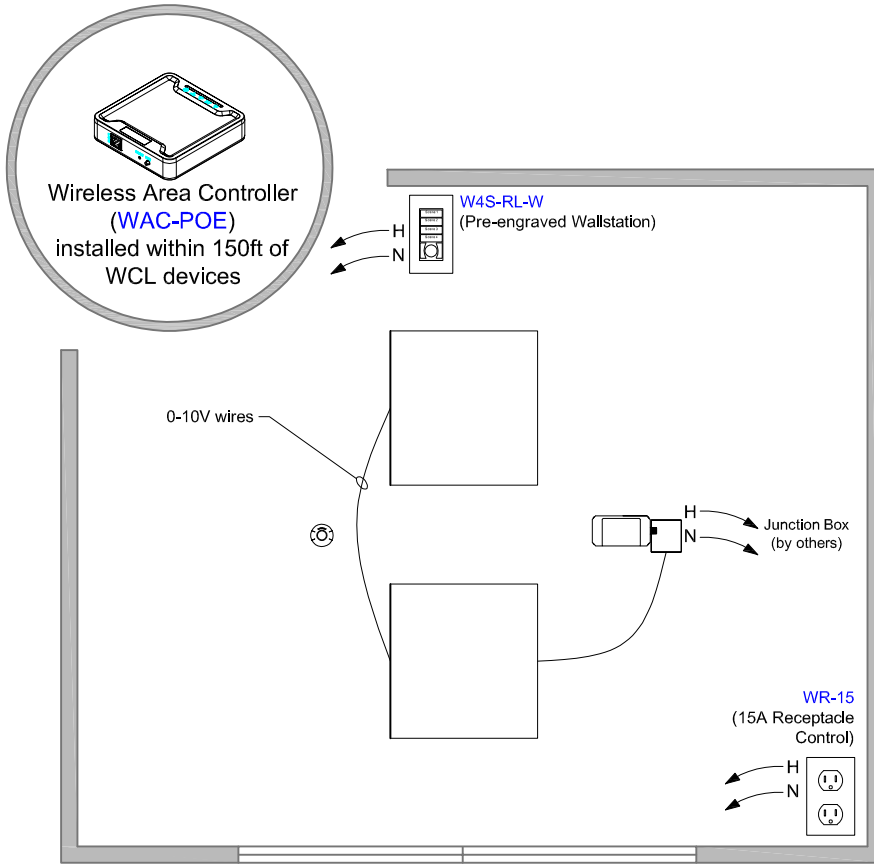
IECC 2015 DESIGN GUIDE

PRIVATE OFFICE SWITCHPACK

WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

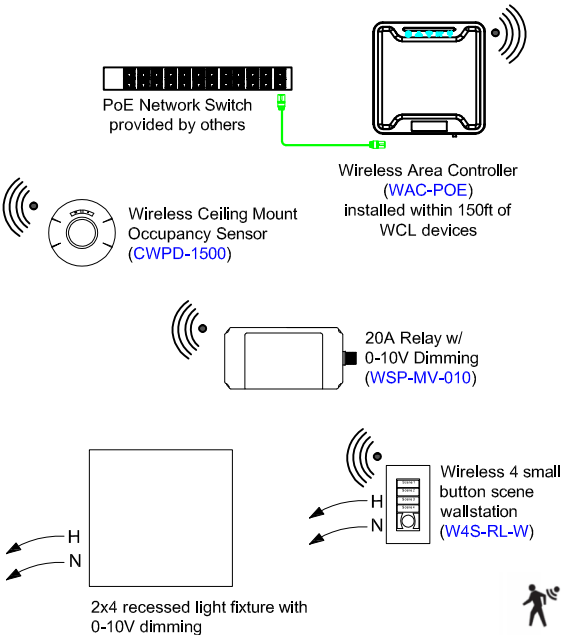
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
1	WSP-MV-010	20A relay with 0-10V dimming
1	WR-15	WaveLinx Receptacle
1	CWPD-1500	WaveLinx ceiling occupancy sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



WaveLinx Wireless Controls

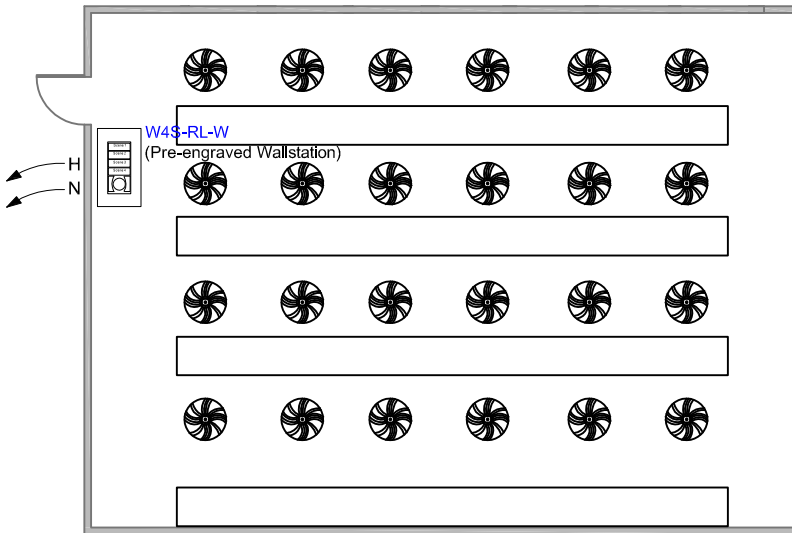
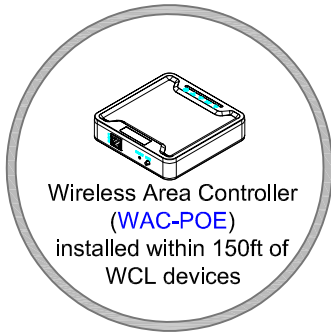
IECC 2015 DESIGN GUIDE

WAREHOUSE WITH 0-10V DIMMING



www.elanlighting.com

(262) 785 - 0144



Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
24	SSLED-24-UNV-L840-CD2-ZW-SWPD3	Steeler High Bay with INstinct Sensor

SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

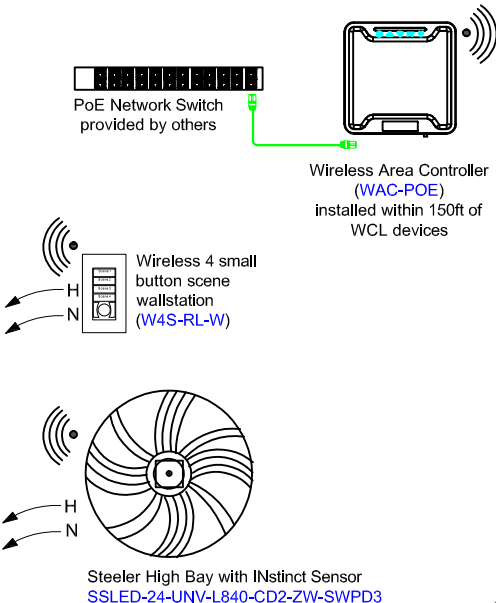
- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

FEB 20



WaveLinx Wireless Controls

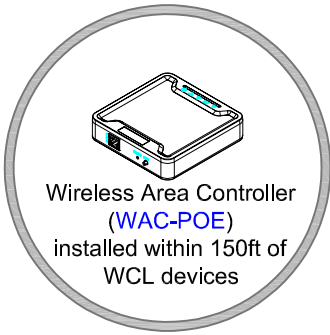
IECC 2015 DESIGN GUIDE

WAREHOUSE SWITCHPACK

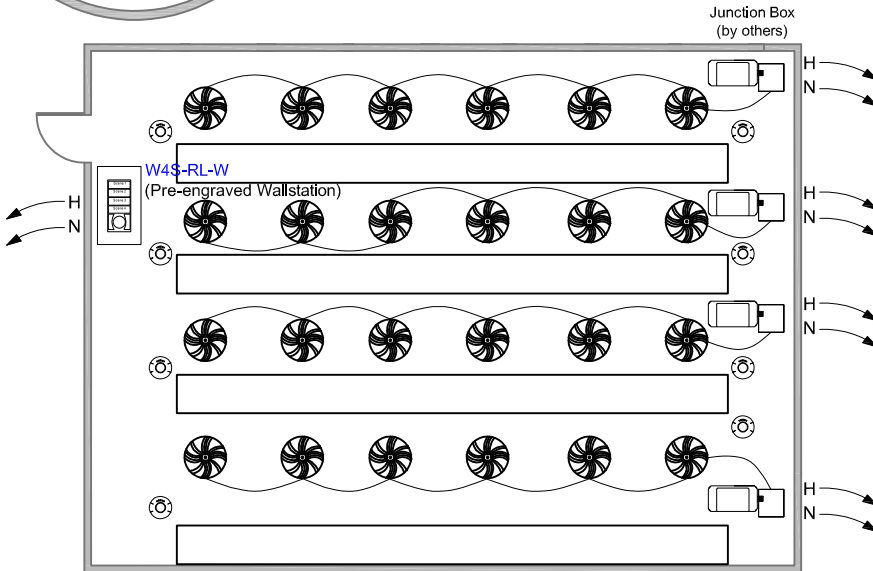
WITH 0-10V DIMMING

www.elanlighting.com

(262) 785 - 0144



Wireless Area Controller (WAC-POE) installed within 150ft of WCL devices



SEQUENCE OF OPERATIONS:

LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

DAYLIGHTING

- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

ADDITIONAL FEATURES

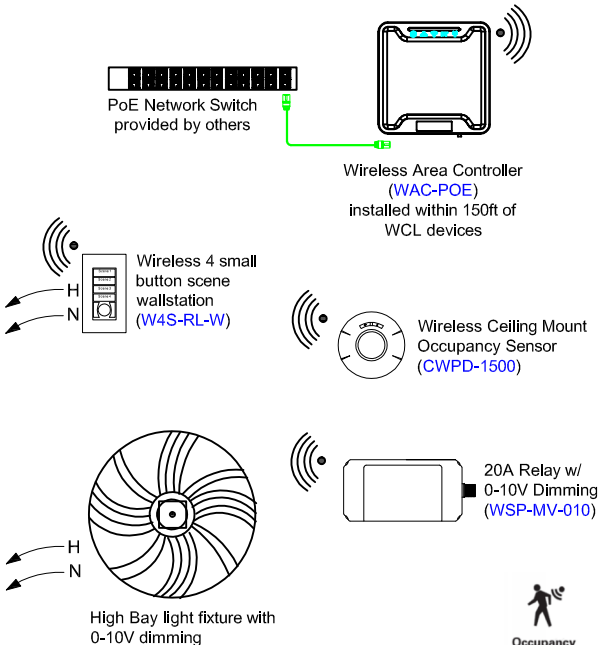
- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP

- UL2900-1 LISTED FOR NETWORK CYBERSECURITY

Bill of Materials

Qty	Catalog #	Description
1	WAC-POE	Wireless Area Controller
1	W4S-RL-W	4 Small button scene wallstation
4	WSP-MV-010	20A relay with 0-10V dimming
8	CWPDP-1500	WaveLinx ceiling occupancy sensor

TYPICAL WIRING DETAIL



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16



WaveLinx Wireless Controls

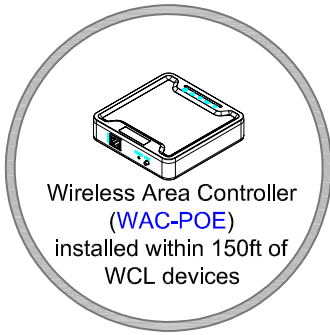
IECC 2015 DESIGN GUIDE

NETWORK POE INJECTOR

POWERED WAC (**WAC-120**)

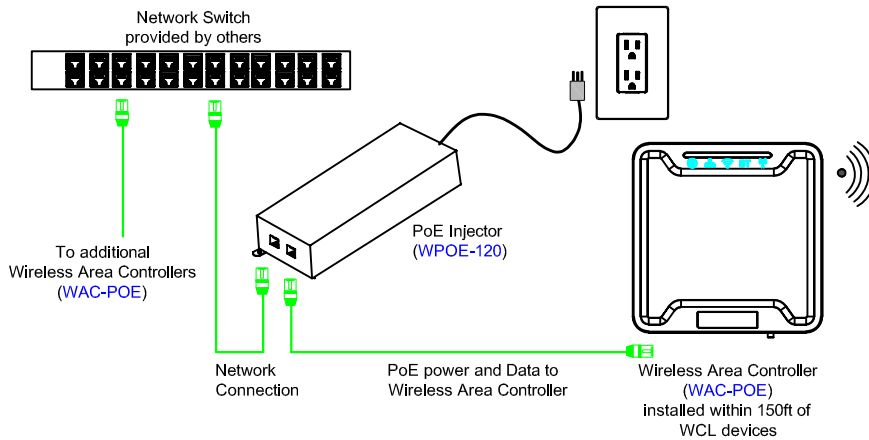
www.elanlighting.com

(262) 785 - 0144



FEATURES

- EASILY INSTALLED ON CEILING, WALL, SHELF, RACK OR DIN RAIL
- POWERED VIA POWER OVER ETHERNET (POE)
- CONTROLS UP TO 150 WAVELINX DEVICES (LIGHT FIXTURES, RELAY SWITCHPACKS, WALLSTATIONS, SENSORS, ETC.)
- SUPPORTS 15 USER DEFINED AND 1 CONSTRUCTION AREA WITH MULTIPLE LIGHTING ZONES, OCCUPANCY SETS AND DAYLIGHT SETS PER AREA
- DRAG AND DROP PROGRAMMING OF LIGHTING ZONES AND AREAS VIA WAVELINX MOBILE APP
- CONNECTS TO BUILDING LAN FOR ACCESS TO BMS AND OPENADR INTERFACES
- **UL2900-1 LISTED FOR NETWORK CYBERSECURITY**



Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16



WaveLinx Wireless Controls

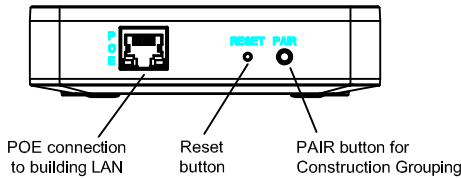
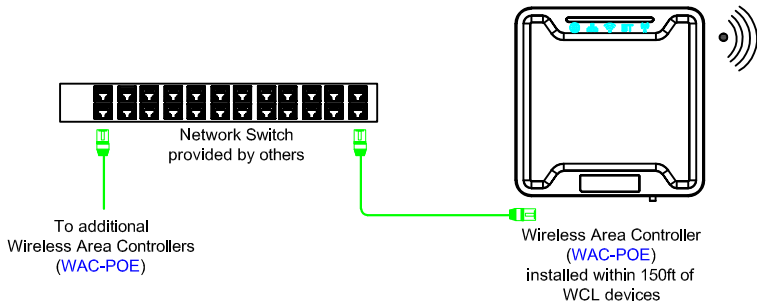
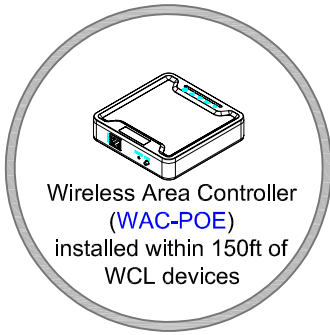
IECC 2015 DESIGN GUIDE

NETWORK WIRELESS ACCESS

CONTROLLER (WAC-POE)

www.elanlighting.com

(262) 785 - 0144



FEATURES

- EASILY INSTALLED ON CEILING, WALL, SHELF, RACK OR DIN RAIL
- POWERED VIA POWER OVER ETHERNET (POE)
- CONTROLS UP TO 150 WAVELINX DEVICES (LIGHT FIXTURES, RELAY SWITCHPACKS, WALLSTATIONS, SENSORS, ETC.)
- SUPPORTS 15 USER DEFINED AND 1 CONSTRUCTION AREA WITH MULTIPLE LIGHTING ZONES, OCCUPANCY SETS AND DAYLIGHT SETS PER AREA
- DRAG AND DROP PROGRAMMING OF LIGHTING ZONES AND AREAS VIA WAVELINX MOBILE APP
- CONNECTS TO BUILDING LAN FOR ACCESS TO BMS AND OPENADR INTERFACES
- **UL2900-1 LISTED FOR NETWORK CYBERSECURITY**

Recommended Design Practices:	Best Practice:	Maximum:
Gateway/WAC range	150 feet to 250 feet	300 feet LOS
Number of interior walls	2 walls	3 walls
Distance from WAC to 1st WCL device	150 feet	200 feet
Distance between WCL devices	75 feet	150 feet
Number of hops from WAC	4 hops	5 hops
Number of areas per WAC	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

