

IMPORTANT NOTICE

The Point Wind Cone (PWC) must be mounted on a solid foundation. The wind cone shall never be mounted on or through a membrane type roof. Relocate the wind cone to a location that has a solid foundation.

Thread the Upper Support Assembly into the top of the threaded adapter and/or lower pole. Use a large pipe wrench to tighten securely. Do not over tighten as you may damage the threads. Use of the pipe wrench will mar the finish of the assembly. If the pole is factory painted, there is a small can of touch up paint enclosed. Place a bead of clear flexible silicone sealant around the point where the Upper Support Assembly enters the top of the threaded adapter and/or lower pole. This will prevent water collection inside the lower pole.

IMPORTANT NOTICE

The installer assumes full responsibility for the proper application and safe installation of this unit in accordance with these instructions, the National Electric Code, and all other state and local codes and practices. POINT LIGHTING accepts no responsibility for damages to property nor injury to personnel for the improper use of this product nor its failure under any circumstances. POINT LIGHTING's warranty is limited to the replacement of the defective unit only if the failure is the result of a manufacturing defect. Contact Point Lighting for Warranty Information.

POINT LIGHTING CORPORATION

Fax 01 860.243.0665

website: www.PointLighting.com

-SM: Stand Mount



INSTRUCTION MANUAL PWC LIGHTED WIND CONE FAA L-806 SIZE 1

A wind cone is used to visually indicate wind direction at airports and heliports. Point Lighting wind cones are installed at airports, hospitals, corporate headquarters and military bases around the world.

CATALOG NUMBERING SYSTEM

FAA TYPE SIZE LIGHTING POWER WINDSOCK OPTIONS

PWC- 806: Frangible 1: 8-ft sock, Size 1 L: lighted Style I -1: 120V -ON: Orange Nylon -2: 230V -RW: Red/White -D: LED Obstruction Light -L: LED Flood Lights -G: Rigid Coupling

Size 1: 8-ft sock has 18-inch diameter frame

PRODUCT DATA

Input Voltage and Power

120 VAC nominal 50/60 Hz (108 – 132V) Incandescent: 596 W

LED: 106 W, 106 VA

230 VAC nominal 50/60 Hz (207 - 253V)

Incandescent: 596 W LED: 74 W, 76 VA

Drawings Attached		
800192	Windsock Basket Assembly	
800866	Wind Cone Assembly L-806	
800141	Lighting Assembly Halogen	
800867	Lighting Assembly LED (-D, -L options)	
801471	Mounting Option -FF Floor Flange	
801405	Mounting Option -SM Stand	

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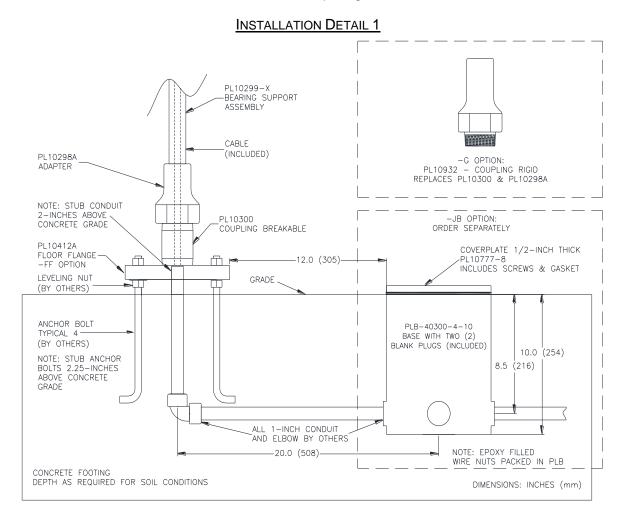
INSTALLATION - FOUNDATION

<u>Warning:</u> The Point Wind Cone (PWC) <u>must</u> be mounted on a solid foundation. The wind cone shall <u>never</u> be mounted on or through a membrane type roof. Relocate the wind cone to a location that has a solid foundation.

Before starting the installation process, please review all drawings provided.

The PWC wind cone must be installed on a level concrete foundation suitable for the local soil conditions. The wiring must enter from beneath the floor flange. Four (4) ½ inch anchor bolts (not supplied) must be installed using the floor flange as a template. The anchor bolts must be plumb vertically and secured threaded end up and above ground during the concrete pour so they cannot move. See Floor Flange drawing 801471, and wind cone assembly drawing 800866. Also refer to Installation Detail 1 below.

Allow the concrete to cure at least 48 hours before completing the installation.



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INSTALLATION - ASSEMBLY

Unpack the PWC Wind Cone and lay the pieces on the ground near the mounting pad. The wind cone will be assembled on the ground before mounting it on the mounting pad. Unpack the PL10290-4-xxx Lighting Assembly. Attach the four (4) floodlight lamp holders (PL10266 / PL10266-L) to the threaded holes drilled in the sides of the junction box. Set the floodlight arm downward at the 67.5-degree angle mark and lock them in place with the provided locknuts. Wire all lamp-holders and optional POL Obstruction Light in parallel. Connect all white wires to white wires. Connect all black wires to black wires. These wires will later be connected to the SOW cord that runs down the pole.

Attach the PL10290-4-xxx Lighting Assembly on top of the PL10299-9.5 Bearing Support Assembly. The top of the Bearing Support Assembly is the end closest to the bearing.

Remove the junction box cover from the PL10290-4-xxx (xxx = voltage, 120 or 230) Lighting Assembly, placing it aside in a safe location. The supplied 30 feet of SOW cable is fitted with a pre-installed cable clamp stress relief and ring terminal on one end of the cable. This end is to be at the lighting assembly junction box. Pull the unmodified end of the SOW cable through the lighting assembly junction box, down through the pole, and out the bottom. In the lighting assembly junction box, position the cable clamp strain relief and tighten the screws so the cable cannot pull out. See drawings **800867 & 800141** for further details of the Lighting Assembly.

See **Installation Detail 1.** Couple the PL10299-9.5 Bearing Support Assembly to the PL10298A adapter, PL10300 coupling and PL10412A floor flange.

Tighten the PL10299-9.5 Bearing Support Assembly hand tight only. Then snug down slightly with hand tool. Do not over tighten as you may damage the threads. After tightening, sand any damage to the painted surface and apply the provided orange touch-up paint.

Place a bead of clear flexible silicone sealant around the point where the Bearing Support Assembly enters the top of the threaded adapter. This will prevent water collection inside the lower pole.

Do not mount PWC to the mounting pad at this time.



INSTALLATION - WIRING

Connect the SOW cable to the wires of the Lighting Assembly using the two (2) epoxy wire nuts provided inside the junction box. The wires from the floodlight lamp holders and the optional POL obstruction light must be wired in parallel. Splice all black (line) wires together using one of the provided epoxy filled wire nuts (PL10227-E-6). Splice all white (neutral) wires together using the other provided epoxy filled wire nut. Refer to lighting assembly drawings **800867 & 800141**.

The green wire of the SOW cable is equipped with a pre-installed ring terminal. This ring terminal must be connected to the ground screw in the lighting assembly junction box.

Reattach the junction box cover with the POL attached to it once all wiring splices have been made.

Make your electrical connections at the base with the power OFF at the source. Refer to wind cone drawing **800866**.

The incoming electric power must be protected by a suitable circuit breaker at the source.

Install the floodlight lamps into the holders on top of the pole and temporarily turn on the power to make sure all your connections are correct, then disconnect power at the source.

NOTE: This product contains metal oxide varistor type surge protection. Due to the leakage current inherent in this surge protection, Point Lighting does not recommend using ground fault interrupter or similar type circuit breakers. Circuit breakers such as GFI (Ground Fault Interrupter), ELCB (Earth Leakage Circuit Breaker) or similar type circuit breakers may experience nuisance tripping.

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INSTALLATION - FINAL

Assemble the PL10289 Basket Assembly as shown in drawing <u>800192</u>. All nuts and all cross-arm connections should be on the inside of the rings so the two rings will have a completely flat surface. Be sure all nuts are tight. We recommend using Loctite 242 on the threads.

Connect the PL10289 Basket Assembly to the Bearing Support Assembly at points indicated on drawing 800192. The completed windcone should look like drawing 800866. Take care not to drop the finished assembly! Do not place any weight on the basket or lighting assembly while erecting the windcone!

Attach the windsock to the Basket Assemblies large ring by placing the flaps over the ring and using the quarter-turn fasteners.

Erect the wind cone on the mounting pad anchor bolts as shown in **Installation Detail 1**. Check the vertical plumb of the pole while another installer adjusts the four nuts until the pole is vertical, plumb and resting on all four nuts. If correct, concrete in the space around the leveling nuts between the floor flange and the concrete pad.

INFORMATION FOR THE OWNER: This unit is rated for steady wind speeds up to 86-mph as stated in the FAA Advisory Circular. This type unit has been tested in accordance with test procedures defined by the FAA. Questions regarding the test procedures and the underlying calculations should be directed to the FAA. Overloading the unit by vehicle or aircraft impact, high winds, wind gusts, wind turbulence, jet blast, excessive loading of snow and ice and similar conditions or combination of conditions will exceed the design load and cause the unit to fail.

MAINTENANCE NOTE: Grease the bearings with a small amount of No. 2 Lithium grease every two (2) months.

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COMMISSIONING GUIDE

☐ Confirm PWC is mounted on a solid foundation.
☐ Confirm all wind cone mounting hardware is tight.
☐ Confirm wind cone basket rotates freely.
☐ Confirm the windsock is installed with grommets facing down.
☐ Confirm all wiring completed and connections properly terminated.
☐ Check that each PWC is properly wired as shown in the Wiring Diagram.
$\hfill \Box$ Verify that the voltage on each fixture label is the same as the system line voltage.
☐ Apply system power to wind cone and confirm all lamps illuminate.

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SPARE PARTS

PART DESCRIPTION		PART NUMBER	QTY/UNIT
Wind Cone Lightin	na Assembly:	PL10290-4-xxx	
(xxx = Voltage, 12	•		
Obstruction Light		POL-20000-R-116-34B	1
Obstruction Light (120V)		POL-20000-R-116A2-34B	1
Obstruction Light (120V) (opt –MT)		POL-20000-R-116-34B-MT	1
Obstruction Light (120V) (opt –WT)		POL-20000-R-116A2-34B-MT	1
Obstruction Light LED (230V) (opt –NT)		POL-21005-2F-R-34B-S-MT-NC	1
Obstruction Light LED (230V) (opt –DIR)		POL-21005-2F-R-34B-S-NC	1
•	_ED (120V) (opt –DIR –MT)	POL-21005-1F-R-34B-S-MT-NC	1
•	_ED (120V) (opt –DIR –WT)	POL-21005-11-R-34B-S-NC	1
•	_ED (1207) (opt =511() _ED (120/230V) (opt =D =MT)	POL-22001-1F-R-34B-S-MT	1
•	_ED (120/230V) (opt –D –WT)	POL-22001-11-K-34B-S	1
Lamp 116W 120V		PL10024-116	1
Lamp 116W 230V		PL10024-116 PL10025-116	1
Lens Red for POL		PL10023-110 PL10001T	1
Lamp holder PAR		PL100011 PL10266	4
Lamp PAR 38 120	3	PL10200 PL10387	4
Lamp PAR 38 120		PL10367 PL10736-1	4
•			4
Lamp holder PAR	` . ,	PL10266-L PL10993	4
Lamp PAR 38 LED 120V (opt –L)			4
Lamp PAR 38 LED 230V (opt –L)		PL10993-1	1
Basket Assembly 8-ft Sock (size 1):		PL10289 PL10289-1	1
Large Ring		PL10269-1 PL10289-2	1
Small Ring			1
Diagonal Brace		PL10289-3	2
Side Brace		PL10289-4	2
Connecting Arm		PL10289-5	1
Hardware		Set CH	
Windsock 8-ft Orange Size 1		PL10063-CH	1
Windsock 8-ft Red/White Size 1		PL10590	1
Bearing Support Assembly:		PL10299-9.5	1
Pipe Assembly		PL10299-1M-9.5	1
Bearing Assembly		PL10319	2
Hardware		Set	1
Bracket, Cross-tie across bearing		PL10321	2
Bracket, Reinforcing Bar 8-ft (size 1)		PL10320-1	1
Breakable Couplin		PL10300	1
Rigid Coupling*	(Option -G)	PL10932	1
Adapter		PL10298A	1
Floor Flange	(Option -FF)	PL10412A	1

^{*}If the owner decides to mount the wind cone on a roof, we recommend Option –G Rigid Coupling be used in place of the standard frangible (breakable) coupling. PL10932 replaces PL10300 & PL10298A.

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