

# Models: PJB2175 & PJB4175

## ELECTRICAL JUNCTION BOX FOR POOL/SPA LUMINAIRES

**CAPACITY: - PJB2175: UP TO 2 UNDERWATER LIGHTS**  
**- PJB4175: UP TO 4 UNDERWATER LIGHTS**

### **DANGER! To Reduce the Risk of Injury:**

...do not permit small children to operate Pool/Spa equipment or use the Pool/Spa unless they are closely supervised at all times.  
...always disconnect electricity before servicing the Pool/Spa equipment.

### **IMPORTANT SAFETY INSTRUCTIONS**

*When installing and servicing this Product and other associated equipment, basic safety precautions should always be followed,*

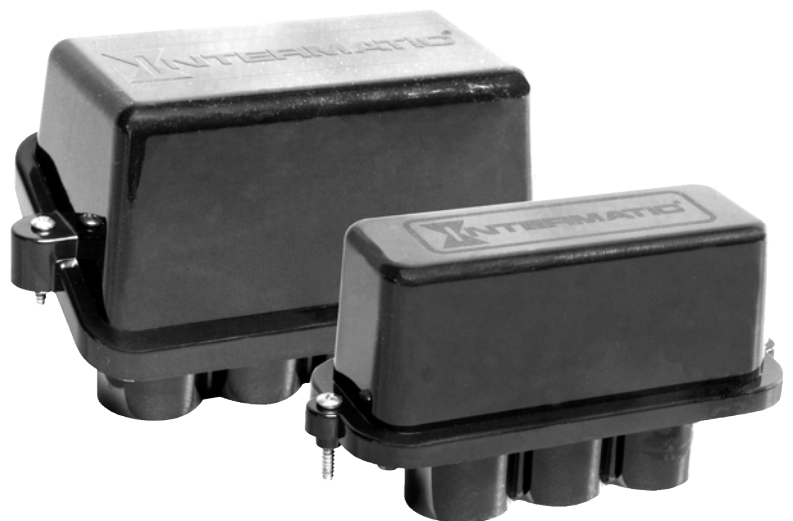
1. Read and follow all instructions.
2. This Junction Box must be installed by a qualified person, according to National and Local Electrical Codes.
3. Install this Junction Box not less than 48 inches from inside edge of pool. USE COPPER CONDUCTORS ONLY.
4. Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.
5. For grounding, bonding, installing and the wiring of underwater luminaires, refer to Article 680 of the National Electrical Code.

**READ, FOLLOW AND SAVE THIS INSTRUCTION MANUAL**

## **GENERAL INFORMATION**

This polymeric, watertight, multi-fixture Junction Box is especially designed for pools, pool-spa combinations and landscape applications. It is very versatile, rugged and simple to install. The Junction Box provides safe and reliable connections for up to four high or low voltage luminaires. It will accommodate flexible cords from #16-3 up to #12-3 and #10-2 in any combination and conduits from 1/2 to 1 inch, including the one for supply conductor feed.

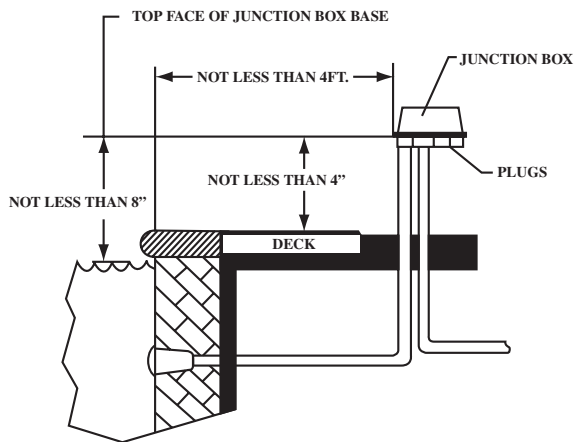
A grounding bar accepts solid or stranded conductors from #16 to #8 gauge. An external bonding lug is also provided in case your installation requires it. An optional wall/post mounting bracket (Model PA114) is available. The Junction Box complies with all the requirements of UL1241 and the National Electric Code.



# INSTALLATION PJB2175 & PJB4175

A wiring layout should be prepared ahead of the installation of this Junction Box with considerations given to the following details.

1. Installation shall be according to Article 680 of the National Electric Code and all applicable local Codes. This Junction Box is suitable for either line or low voltage luminaires.
2. Use copper conductors only.
3. This Junction Box will accommodate water resistant flexible cord, #16/3 or #14/3 Extra-hard usage (Type SOW, STW or STOW) or, #12/3 or #10/2 Hard usage (Type SJW, SJTW or SJTWO).
4. The Junction box must be rigidly supported and unused conduit openings permanently plugged with the plugs provided.



## Installation

1. Determine best location for the Junction Box and run properly sized conduits as per the wiring layout. **The Junction Box shall be located not less than 4 feet from the inside wall of the pool. It must also be at least 8 inches above the maximum water level and not less than 4 inches above deck or grade.** (See Illustration) Make sure the Junction Box can be rigidly supported. The optional mounting bracket (Model PA114) is designed to accommodate either wall or stake mounting.
2. Cut off all conduits at the same level. Use reducer bushings furnished as needed for installation. For 1/2 inch conduit, apply PVC Solvent Cement 1 inch down conduit and to small inside diameter of reducer bushing. Slide small end of reducer bushing over conduit to the stop tab. For 3/4 inch conduit, break the stop tab off of reducer bushing and PVC Solvent Cement large inside diameter of reducer bushing to conduit. PVC Solvent Cement large outside diameter of reducer bushings or 1 inch conduit to Junction Box base. **Permanently close all unused conduit openings with the plugs provided.**
3. An optional external bonding lug is provided. Connect to Equipotential Bonding Grid, if your installation requires it.
4. Pull supply conductors from source and flexible cord from luminaires into Junction Box. Use twist on wire connectors or other approved termination method for power connections. Connect ground conductors and bonding conductors, if required, to ground bar. Tighten terminal screws 35 in-lbs minimum.
5. Install strain reliefs. The direction that the clamps go on depends on the diameter of cable. For cables smaller than 1/2 inch (#16/3 or #12/3), install clamps with the arrow pointing down. For cables larger than 1/2 inch (#14/3 or #10/2) install clamps with the arrow pointing up. Tighten screws evenly until clamp bottoms out. If required, make bonding connections to the grounding bar and to external bonding lug.
6. Check tightness of connections, make sure gasket is properly seated and close the Junction Box with the screws provided.

## TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
1. On light is OFF	a. Burned - out bulb b. Bad connection	a. Replace bulb b. Correct defect
2. All lights are OFF	a. Tripped breaker b. Open GFCI	a. Reset breaker b. Call Electrician

### ONE YEAR LIMITED WARRANTY

If within one (1) year from the date of purchase, this product fails due to a defect in material or workmanship, except diverter seal, which is warranted for the life of the product Intermatic Incorporated will repair or replace it, at its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (f) transit damage, initial installation costs, removal costs, or reinstallation costs.

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This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) mailing the product, along with proof of purchase, postage prepaid to the authorized service center listed below. This warranty is made by: Intermatic Incorporated/After Sales Service/7777 Winn Rd., Spring Grove, Illinois 60081-9698/815-675-7000 <http://www.intermatic.com> Please be sure to wrap the product securely to avoid shipping damage.

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