

# INTERMATIC® PX SERIES LOW VOLTAGE LANDSCAPE AND SWIMMING POOL/SPA LIGHT TRANSFORMERS

## INSTALLATION OPERATION & SERVICE MANUAL

**Model: PX100 and PX100S - 100 Watt Transformers**  
INPUT: 120 V.AC, OUTPUT: 12 V.AC or 13 V.AC

**Model: PX300 and PX300S - 300 Watt Transformers**  
INPUT: 120 V.AC, OUTPUT: 12 V.AC, 13 V.AC or 14 V.AC

Suitable for direct connection to underwater lights and for Indoor/Outdoor installations except in CANADA - Low Voltage Landscape Lighting installation - Outdoor only.

Read and follow the safety instructions listed below and other basic safety precautions before installation or operation of this transformer and other associated equipment.

**⚠ WARNING Risk of Fire or Electrical Shock!**

- If installation involves running wire through a building structure, special wiring methods are needed.
- Do not submerge transformer.
- Do not connect two or more transformers in parallel or use with dimmers.

**⚠ CAUTION Risk of Injury or Property Damage!**

- This transformer must be installed by a qualified electrician, according to the National Electrical Codes (including article 680) or Canadian Electrical Code (including section 68) and, local requirements.
- USE COPPER CONDUCTORS ONLY.
- Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.
- Do not install this equipment within 5 feet (3 meters for Canadian installations) of any body of water.
- If transformer is used for direct connection of underwater lights, refer to NEC 680-24(b) or CEC 68-060, 062 and 066 for further details.
- For Canadian installations, supply circuit must be protected by a ground fault circuit interrupter.
- Installation is subject to approval by the local inspection authority.

## GENERAL INFORMATION

These Safety Transformers are specifically designed to supply 12 volts to pool/spa lights, submersible fixtures and outdoor garden lights. A grounded shield between the primary and secondary windings assures safe operation and the built-in circuit protection will disconnect power to the transformer in case of defect or overload. These transformers are suitable for direct connection to underwater Pool and Spa lights.

### SPECIFICATIONS

**Enclosure Size:** 7 1/4" (19.4 cm) high x 5 1/4" (13.3 cm) wide x 4 1/2" (11.4 cm) deep. Mounting brackets top and bottom.

**Enclosure Type:** (A) 0.048" corrosion resistant steel with electrostatically applied beige coating. (B) 0.036" stainless steel.

**Knockouts:** Total of ten 1/2"-3/4" combination. (4) bottom, (2) right side, (2) left side, (2) back.

Model	Input 60 Hz.	Secondary Output		Enclosure Type
		Lamp Watts*	Volts	
PX100	120V. 1 Amp Max.	100 Max.	12 or 13	A
PX100S	120V. 1 Amp Max.	100 Max.	12 or 13	B
PX300	120V. 3 Amp Max.	300 Max.	12, 13 or 14	A
PX300S	120V. 3 Amp Max.	300 Max.	12, 13 or 14	B

\* Any combination of bulbs, any tap.



# Pool/Spa Underwater Lighting Application

## INSTALLATION

**For field wiring information, please refer to the instructions attached to inside of front cover.**

- The enclosure of the transformer must be provided with a fail-proof ground as required by NEC, Article 680 and any applicable local codes For Canadian installations, the supply circuit must be protected by a ground fault circuit interrupter.
- For direct wiring of underwater lights, the installation must comply with article 680-24(b) of the National Electrical Code, or articles 68-060, 062 and 066 of the Canadian Electric Code.
- The transformer should be mounted at least 1 foot above the deck level with the field wiring compartment down.
- Make sure that all unused taps (leads) are separately insulated.
- Use the following tables as a guide to determine the correct wire size.
- Check voltage at lamp terminals after installation. It should be 12 ± 0.3 volts.

### 120 Volt Primary Input - 100 Watt Output

Distance* Feet	2#6AWG	2#8AWG	2#10AWG	2#12AWG	2#14AWG
5 Ft.	12V	12V	12V	12V	12V
30 Ft.	12V	12V	12V	13V	13V
60 Ft.	12V	12V	13V	13V	
90 Ft.	12V	13V	13V		
120 Ft.	13V	13V			
150 Ft.	13V	13V			
180 Ft.	13V				
210 Ft.	13V				
240 Ft.	13V				

\* Length of run to light from transformer.

### 120 Volt Primary Input - 300 Watt Output

Distance* Feet	2#6AWG	2#8AWG	2#10AWG	2#12AWG
5 Ft.	12V	12V	12V	12V
10 Ft.	12V	12V	12V	13V
20 Ft.	12V	12V	13V	13V
30 Ft.	12V	13V	13V	14V
40 Ft.	13V	13V	14V	
50 Ft.	13V	13V	14V	
60 Ft.	13V	14V		
70 Ft.	13V	14V		
80 Ft.	13V	14V		
90 Ft.	14V			
100 Ft.	14V			
110 Ft.	14V			

\* Length of run to light from transformer.

## LANDSCAPE LIGHTING APPLICATIONS

### **WARNING Risk of Fire or Electrical Shock!**

**SELECT CABLE.** See Chart.

- Failure to use appropriate gauge cable or install it as directed in these instructions and chart may result in Risk of Fire or Electric Shock.
- Use only CSA or UL approved low-voltage cable.
- Low voltage cable shall be buried a maximum 6 inches (15.2 cm) in order to connect to the main low voltage cable.

Transformer Wattage	Minimum Gauge Cable
<b>300</b>	<b>12</b>
<b>100</b>	<b>16-14-12</b>

#### LIMITED ONE YEAR WARRANTY

If within the warranty period specified, this product fails due to a defect in material or workmanship, 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) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstallation costs.

**INTERMATIC INCORPORATED WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY MODIFIED TO EXIST ONLY AS CONTAINED IN THIS LIMITED WARRANTY, AND SHALL BE OF THE SAME DURATION AS THE WARRANTY PERIOD STATED ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON THE DURATION OF AN IMPLIED WARRANTY, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

This warranty service is available by either (a) returning the product to the dealer from whom the unit was purchased, or (b) completing a warranty claim on line at [www.intermatic.com](http://www.intermatic.com). This warranty is made by: Intermatic Incorporated Customer Service/7777 Winn Rd., Spring Grove, Illinois 60081-9698 815-675-7000 <http://www.intermatic.com>

*Because of our commitment to continuing research and improvements, Intermatic Incorporated reserves the right to make changes, without notice, in the specifications and material contained herein and shall not be responsible for any damages, direct or consequential, caused by reliance on the material presented.*

**INTERMATIC INCORPORATED, SPRING GROVE, IL 60081-9698**

<http://www.intermatic.com>