

## Valve Actuator Control - Valve Actuator Control, Type 3R Metal Enclosure

Item PE140



### PRODUCT DESCRIPTION

This product is perfect for controlling the direct flow of water to desired Pool and SPA applications. The output controls 24 V electronic valve actuators and the input can be wired to 120 VAC or 240 VAC. It can also be used with a spring-wound timer or simple switch to control fountains or other aquatic features.

### FEATURES

- ▶ Easily snaps into most existing Intermatic enclosures with available mechanism support bracket
- ▶ Controls up to three valve actuators
- ▶ Switches heater thermostat HIGH/LOW
- ▶ Remote control capabilities

### APPLICATIONS

- ▶ Motor Control
- ▶ Pump Control

### TECHNICAL DATA

#### General

Model Number	PE140
Description	Valve Actuator Control, Type 3R Metal Enclosure
UPC Code	078275125049
Brand	Intermatic
Country of Origin (Intermatic)	CHINA
Warranty Period	1-Year limited

#### Mechanical Specifications

Enclosure Type	Indoor/outdoor type 3R metal
Number of Actuator Ports Controlled	3

#### Dimensions

Product Dimensions (H x W x D) in	10.131 x 6.513 x 3.623 in
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#### Material Specifications

Color	Black
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#### Electrical Specifications

Input Voltage Range(s)	120/240 VAC, 50/60 Hz
Actuator Supply Voltage	24 VAC, 40 VA

#### Packaging

Shipping Weight (lbs)	2.894
Product Weight (kg)	1.36
Unit Carton Dimensions (H x W x L) in	10 x 7 x 4 in
Product Weight (lbs)	3

#### Standards and Certifications

CSA Certification	cCSAus
California Proposition 65	DEHP
RoHS Certification	X

# Actuator Controller

Model: PE140 Motorized Valve Control  
in Indoor/Outdoor Enclosure

Model: P4043ME Control Mechanism only

Input: 120 or 240 Volt 50/60 Hz

Output: 24 VAC - 40 VA Max



## Installation and User Guide

# ! DANGER

- Do not permit small children to operate or use the Pool/Spa unless they are closely supervised at all times.
- Test GROUND FAULT protection regularly. If it fails to reset, DO NOT USE THE POOL or SPA! Contact a qualified service technician.
- Always disconnect electricity before servicing this Control or the equipment connected to it.

# ! WARNING

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

- This Control must be installed by a qualified person, according to National and Local Electrical Codes.
- Install this Control no less than 5 feet (3 meters in Canada) from inside edge of pool. USE COPPER CONDUCTORS ONLY rated 75°C minimum.
- Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors.
- For Control grounding, bonding, installing and the wiring of underwater lights, refer to Article 680 of the National Electrical Code or Article 68 of the Canadian Electrical Code.
- The Control should not operate any equipment which could cause bodily injury or property damage should it be activated unexpectedly.

## GENERAL INFORMATION

This SWITCHING Device is most suited for controlling the shared equipment of Pool-Spa combinations but it can be also used to control all the equipment typically needed in connection with water features, water gardening solar heating and other similar applications.

The Mechanism is designed to “snap” into most Intermatic panels and outdoor enclosures in use today and it can be interfaced with other Intermatic products in order to facilitate a large number of custom applications.

## WIRING INSTRUCTIONS

**NOTE: High and low voltage wires should not occupy the same conduits and compartments.**

If needed, install corrugated tubing kit, Part No. 156PA12976A first (not supplied).

1. Make power connections to Transformer. If 120 Volt, connect supply to BLK and WHT leads, if 240 Volt, connect supply to BLK and RED leads. **Insulate (cap) unused lead.**
2. Plug Motorized Valve Acuator(s) into any polarized receptacle(s) see drawing.
3. Connect any external REMOTE SWITCH to the two Black and White striped leads as shown below and apply the Trigger Voltage of either 120 or 240VAC.
4. If applicable, make heater connections. Remove terminal block from socket and depending on the type of heater, follow one of the diagrams on page 3.
5. If applicable, make Remote Control connection to the 8 pin polarized receptacle.

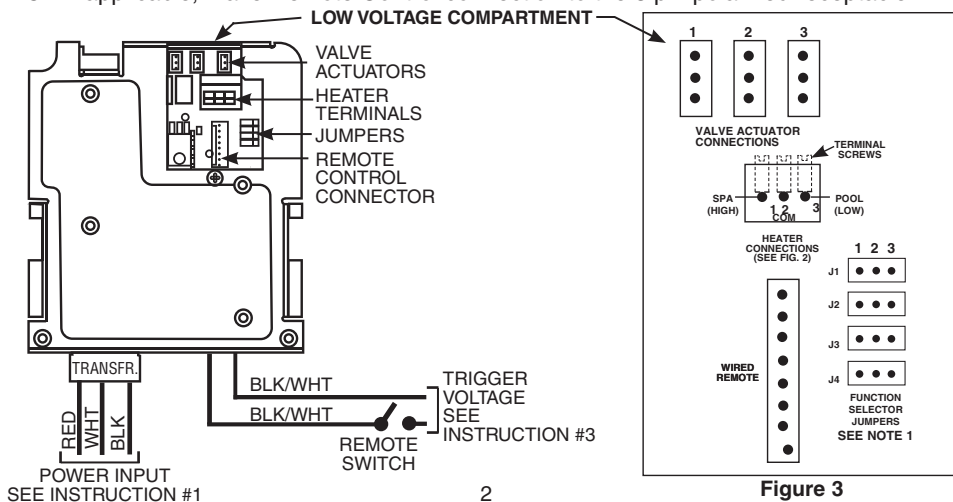
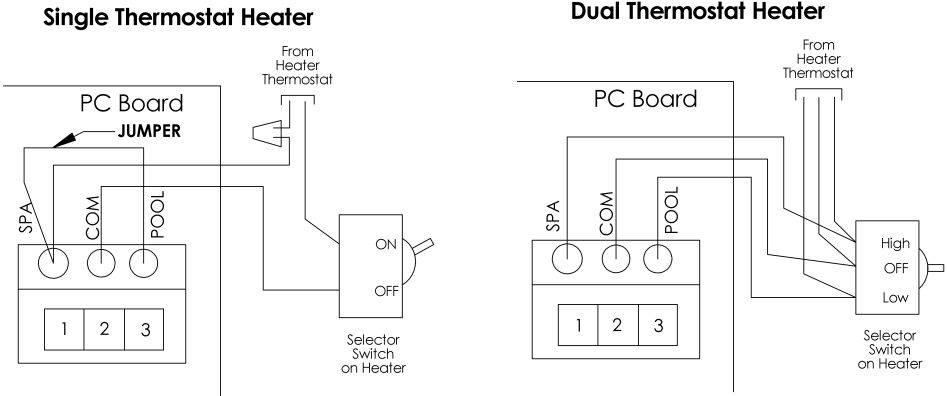


Figure 3

**FUNCTION SELECTOR JUMPER SETTINGS:**

- J1 MASTER SWITCH
- 1-2 Latching
- 2-3 Momentary

Factory setting is 1-2 for all four Jumpers



**OPERATION**

Every time the position of the REMOTE SWITCH changes, the Motorized Valve(s) rotate to the opposite position. In addition, if connected, the heater thermostat setting changes from LOW to HIGH or HIGH to LOW.

**TROUBLE SHOOTING**

<u>Problem</u>	<u>Cause</u>	<u>Solution</u>
1. Nothing works.	<ul style="list-style-type: none"> <li>a. No power to transformer</li> <li>b. 120 Volt is connected to 240 Volt leads</li> <li>c. 240 Volt was connected to 120 Volt transformer leads.</li> </ul>	<ul style="list-style-type: none"> <li>Check power supply</li> <li>Connect 120 Volt supply to Black and White leads</li> <li>Replace defective control unit</li> </ul>
2. Remote installed Actuator Switch will not operate equipment.	<ul style="list-style-type: none"> <li>a. Jumper J1 is on pins 2-3 or missing.</li> </ul>	<ul style="list-style-type: none"> <li>Place Jumper J1 on Pins 1-2</li> </ul>
3. Wired remote is not working	<ul style="list-style-type: none"> <li>a. Connector is incorrectly attached</li> <li>b. Corroded/dirty connector pins</li> </ul>	<ul style="list-style-type: none"> <li>Re-attach 8-pin connector</li> <li>Clean connector pins.</li> </ul>
4. Valve actuators work opposite pump relay	<ul style="list-style-type: none"> <li>a. Actuators are out-of-sync</li> </ul>	<ul style="list-style-type: none"> <li>Synchronize actuators (Refer to valve actuator manual)</li> </ul>

## 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>



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(8 a.m. through 4:30 p.m. CT, Monday through Friday)