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# Icon Legend:







CSA Tested to UL Standards



Canadian Standards Association Approved



Underwriters Laboratories Listed



California Title 20 Compliant



Products

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21T156A 49	PA11821	PE1530023	PX300S 42	T104R331
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# **Energy Consumption:**

# Can you afford to leave your Filter Pump on High-Speed all Day?

Pool operation can be 20% of your entire electrical consumption. Title 20 recommends filtering pool water only twice per 24 hour period - which is sufficient for most residential pools. Intermatic has several digital, multi-circuit solutions that offer features to control Two-Speed and Variable-Speed pumps. For simple Two-Speed control, the P1353ME (Mechanism) snaps right into most existing Intermatic enclosures. For Variable-Speed control, the new PE653 Multi-Wave connects to any existing enclosure. See Intermatic's offering for simple, efficient upgrades that meet Title 20 and other new energy legislation.





# Intermatic pool and spa controls are affordable, efficient and easy to install

The core components are interchangeable to provide you with the flexibility you need to manage your pool, spa and backyard. Intermatic makes it easy for you to choose the right controls for your new pool, or upgrade an existing pool control to digital and wireless operation. Parts can be purchased as mechanisms that easily snap into most existing Intermatic enclosures or packaged inside raintight enclosures.

### INTERMATIC'S WAVE SERIES and INDIVIDUAL PARTS

Bump Control Speed

Series	Circuits	Variable Speed	Two Speed	Single Speed	Booster Pump	Freeze Protection	Heater/ Thermostat	Actuator Control	Z-Wave	Wireless
Multi-Wave	5	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
I-Wave	5	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Mini-Wave	5	No	No	Yes	Yes	No	Yes	Yes	No	Yes
Pool-Wave	3	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Spa-Wave	3	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes
PE1353ME*	3	No	Yes	Yes	Yes	Yes	No	No	No	No

\* Just snaps in to existing enclosures for an instant upgrade!



# Multi-Wave wireless control for one, two or variable speed pumps

### **Features:**

- 5 Circuits
- Wireless control
- Controls Variable Speed , Two-Speed and Single-Speed pumps
- Plug and Play equipment detection and set-up easy to initialize and use
- Handheld circuit display can be customized to suit your specific equipment control need
- Z-Wave compatable

Setup is easy – just choose your equipment from the Multi-Wave equipment list, and the Multi-Wave automatically locates and sets up the equipment.



P1353ME Digital 3 Circuit Clock Mechanism

# **Upgrading is a Snap!!**

The P1353ME snaps into most Intermatic enclosures.

### Features:

- 3 separate circuits 2 Speed Pump Control (HIGH/LOW)
- Pre-programmed modes for equipment combinations Saves set-up time
- 3 ON/OFF events per circuit



# **Valve Actuator Controls for Pool/Spa Combinations**



# P4243ME

- Controls 3 valve actuators simultaneously
- 2 Separate Relays for other pool/backyard equipment



# P4043ME

 Controls 3 valve actuators simultaneously



# **Wireless Control**

Add wireless control to your current 3 circuit clock and/or actuator control

### Features:

- ON/OFF switching of circuits
- Temperature control
- Activation of actuator controls
- Easy to read backlit remote
- Displays Time of Day and Water Temperature
- Water submersible

# PE650 Receiver



# **Enclosures**

Intermatic offers separate enclosures to house the individual components, breaker panels and transformers.





# Variable Speed & Two Speed **Control Systems**

# MULT NEW

# PE653RC



**PE653** 



**PE953** (See page 20-21)





# **₩**Wireless 5-Circuit Pool/Spa Control System PE653RC

The "Multi-Wave" Wireless Control System Controls Pools/Spas and now your Home!

Combine the PE653 Multi-Wave Controller with the PE953 Multi-Wave Hand Held Transceiver and automate your

pool/spa and even your home with the most technologically advanced wireless control system in the market today!

The Multi-Wave is designed as a "plug and play" system. Install the water sensor PA122 (see page 21) and watch the Multi-Wave thermostat come alive to maintain your pool and/or spa water temperatures. Install the air sensor 178PA28A (see page 21) and let the Multi-Wave freeze protection system take over to protect your investment. Connect your equipment to the intelligent RS485 communication port and relax as the Multi-Wave recognizes and controls your equipment with ease.

### Included:

- Owner's Manual
- Three AA Batteries
- Small Flat Head Screwdriver
- Equipment Labels
- Hand Held PE953 Transmitter
- Water Sensor with Hose Clamp
- Receiving PE653 Controller with 2T2485GA Enclosure

### **Specifications:**

Enclosure & Control: NEMA 3R rated for Indoor/Outdoor installation in beige finish

 $9\frac{3}{8}$  in. (23.8 cm) H x  $5\frac{1}{2}$  in. (14.0 cm) W x  $3\frac{5}{8}$  in. (9.2 cm) D

Enclosure Knockouts: Combination 1/2 - 3/4 in. nominal knockouts, one on back and

each side of enclosure and two on bottom

Shipping Weight: 5.4 lbs (2.3 kg) Agency Approval: CSA/C-US

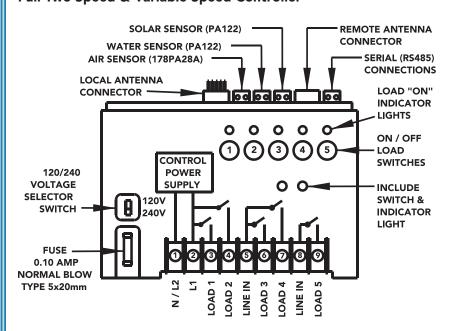
### Ratings:

Control Supply: 120, 240 VAC, 50/60Hz, 5-Watts Maximum

Circuit #1: 20 Amp Resistive (17 FLA, 80 LRA), 120, 240 VAC 50/60 Hz

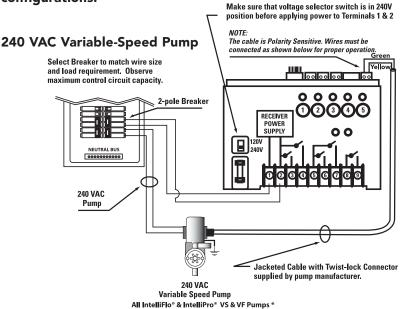
Circuit #2 thru #5: 15 Amp Resistive (10 FLA, 60 LRA), 120, 240 VAC, 50/60 Hz

# Full Two-Speed & Variable Speed Controller



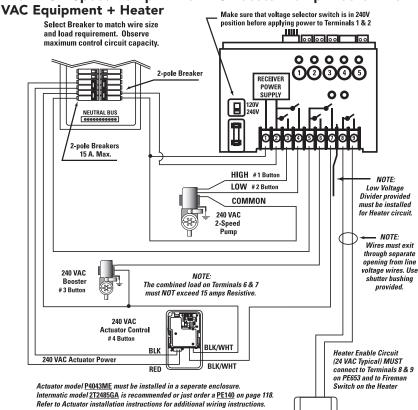
# Multi-Wave Accessories & Applications

There are many equipment pad configurations the Multi-Wave Control System can control. Below are a few of the most common configurations.



\* IntelliFlo and IntelliPro are registered trademarks of Pentair Water Pool and Spa, Inc.

240 VAC 2-Speed Pump + 240 VAC Booster Pump + other 120



Refer to Heater manufacturer's

installation instructions for

HEATER

# Optional Controller Accessories: (Not Included)



# Freeze (Air Temperature) Sensor 178PA28A

Needed to sense and display outside air temperature and activate freeze protection. See page 21



### **Actuator Control P4043ME**

Needed to control actuators for pool and spa applications. (Rain Tight Enclosure Needed.) See page 18-19



# Raintight Enclosure 2T2485GA

Needed to house the P4243ME Actuator Controller. (If no enclosure is present.) See page 31





# PE20000RC Series 60 Amp Variable Speed & Two Speed Control Systems



Wireless 5-Circuit Pool/Spa Control System with 60 Amp Breaker Base, Actuator Control & Two Actuators

Combine the features of the PE653RC Multi-Wave Control System with the convenience of the PE20000 60 Amp Intermatic Panel and create a powerful PE20065RC wireless control system kit for any pool or spa installation. The PE20000 series panel includes a four position 60 Amp breaker base to accommodate a variety of different equipment loads and one mechanism slot to accommodate the vast array of mechanisms Intermatic has to offer. In addition, there is a low voltage raceway for low voltage control lines (i.e. actuators, sensors, etc...), two décor knockouts for GFCIs and switches, and a convenient side knockout for an outdoor receptacle.

Order PE24065RC, which includes a P4043ME mechanism and two PE24VA actuators, and remotely control any pool and spa combination. With this addition, you can now switch both your water valves and heater thermostat settings between your pool and spa with a click on your wireless control. These are by far the most affordable and versatile control systems offered today.

### **Included in Kits:**

- Multi-Wave Control System (PE653RC) Owner's Manual
- Three AA Batteries
- Equipment Labels

- Small Flat Head Screwdriver
- Hand Held (PE953) Transmitter
- Water Sensor (PA122) with Hose Clamp 
   PE20000 Enclosure w/60 Amp Base
- P4043ME Actuator Controller (PE24065RC only)
- (2) PE24VA Water Valve Actuators (PE24065RC only)

# **Specifications:**

**Enclosure & Control:** NEMA 3R rated for Indoor/Outdoor installation 0.048 in. steel with electrostatically applied light beige finish.  $16\frac{1}{2}$  in. (41.9 cm) H x  $10\frac{7}{8}$  in. (27.6 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Enclosure Knockouts:** Two 1.09 in. diameter through holes, six combination  $\frac{1}{2}$  –  $\frac{3}{4}$  in. knockouts, and three combination  $\frac{3}{4}$  – 1 in. knockouts on the bottom. Two combination  $\frac{1}{2}$  –  $\frac{3}{4}$  in. on the left side and one combination  $\frac{3}{4}$  – 1 in. on the back. One knockout  $\frac{13}{4}$  x  $\frac{23}{4}$  in. on the right side for mounting switches or GFCI

Panel Rating: 60 Amp, 120, 240 VAC or 120, 208 VAC single phase

**Shipping Weight:** 5.4 lbs (2.3 kg) **Agency Approval:** CSA/C-US

# Ratings:

Control Supply: 120, 240 VAC, 50/60 Hz, 5-Watts Maximum

Circuit #1: 20 Amp Resistive (17 FLA, 80 LRA) 120, 240 VAC 50/60Hz

Circuits #2 thru #5: 15 Amp Resistive (10 FLA, 60 LRA) 120, 240 VAC 50/60 Hz

Note: The following page refers to only a fraction of the most common applications of the Multi-Wave Control System. Contact your Intermatic representative or visit www.intermatic.com and visit the Pool & Spa section of our website for more application ideas and details.



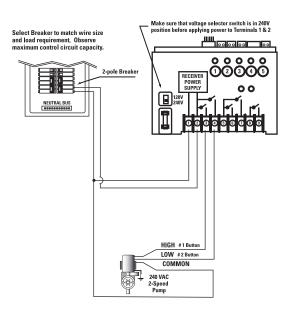




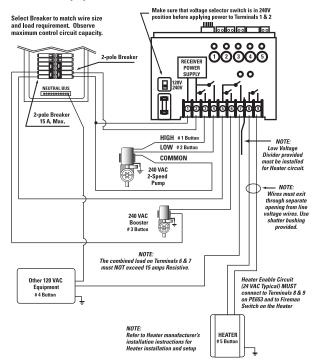
# Common PE20000RC Applications

# PE20065RC Applications

240 V 2-Speed Pump

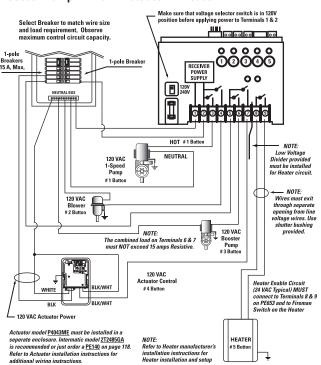


240 V 2-Speed Pump + 240 V Booster Pump + other 120 VAC Equipment + Heater

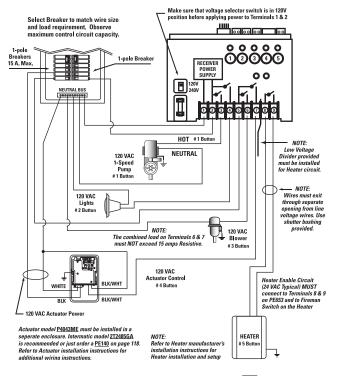


# PE24065RC Applications

120 V 1-Speed Pump + 120 VAC Blower or Lights + 120 V Booster Pump + 120 V Actuator + Heater



120 V 1-Speed Pump + 120 V Blower + 120V Lights + 120 V Actuator + Heater







# PE30000RC Series 80 Amp Variable Speed & Two-Speed Control Systems

# PE30000RC Series Kits

Wireless 5-Circuit Pool/Spa Control System with 80 Amp Breaker Base, Actuator Control & Two Actuators

Some heat pumps can consume between 40 and 60 Amps worth of power; therefore, it may be necessary to have a higher amperage breaker base to accommodate heat pumps. Combine the features of the PE653RC Multi-Wave Control System with the convenience of the PE30000 80 Amp Intermatic Panel and create a powerful PE30065RC wireless control system kit for any pool or spa installation. The PE30000 Series Panel includes an eight position 80 Amp breaker base to accommodate a variety of different equipment loads and two mechanism slots to accommodate the vast array of mechanisms Intermatic has to offer. In addition, there is a low voltage raceway for low voltage control lines (i.e. actuators, sensors, etc...), four décor knockouts for GFCIs and switches, and a convenient side knockout for an outdoor receptacle.

Order a PE34065RC which includes a P4043ME mechanism and two PE24VA actuators and remotely control any pool and spa combination. With this addition, you can now switch both water valves and heater thermostat settings between your pool and spa with a click on your wireless control. These are by far the most affordable and versatile control systems offered today.

### Included in Kits:

- Multi-Wave Control System (PE653RC) Owner's Manual
- Three AA Batteries
- Equipment Labels
- Small Flat Head Screwdriver
- Hand Held (PE953) Transmitter
- Water Sensor (PA122) with Hose Clamp PE30000 Enclosure w/80 Amp Base
- P4043ME Actuator Controller (PE34065RC only)
- (2) PE24VA Water Valve Actuators (PE34065RC only)

### **Specifications:**

**Enclosure & Control:** NEMA 3R rated for Indoor/Outdoor installations 0.048 in. steel with light beige finish

22 in. (55.9 cm) H x 143/4 in. (37.5 cm) W x 41/4 in. (10.8 cm) D

**Enclosure Knockouts:** Two 1.09 in. diameter through holes, six combination  $\frac{1}{2} - \frac{3}{4}$  in. knockouts, 2 combination  $\frac{3}{4}$ , 1,  $\frac{1}{4}$  in. knockouts, four  $\frac{1}{2}$  in. knockouts on the bottom. Two combination  $\frac{1}{2} - \frac{3}{4}$  in. knockouts on the left side and four combination  $\frac{1}{2} - \frac{3}{4}$  in. knockouts, two combination  $\frac{3}{4} - 1$  in. on the back. One knockout  $\frac{1}{4}$  x  $\frac{2}{4}$  in. on the right side for mounting switches or GFCI.

Panel Rating: 80 Amp 120, 240 VAC or 120, 208 VAC single phase

**Shipping Weight:** 5.4 lbs (2.3 kg) **Agency Approval:** CSA/C-US

### Ratings:

Control Supply: 120, 240 VAC, 50/60 Hz, 5-Watts Maximum

Circuit #1: 20 Amp Resistive (17 FLA, 80 LRA) 120, 240 VAC 50/60 Hz

Circuits #2 thru #5: 15 Amp Resistive (10 FLA, 60 LRA) 120, 240 VAC 50/60 Hz

Note: The following page refers to only a fraction of the most common applications of the Multi-Wave Control System. Contact your Intermatic sales representative or visit www.intermatic.com and visit the Pool & Spa section of our website for more application ideas and details.





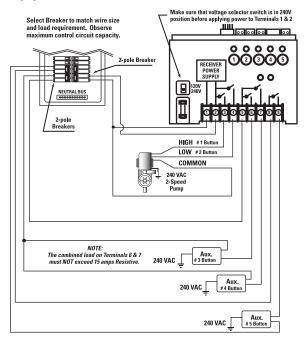




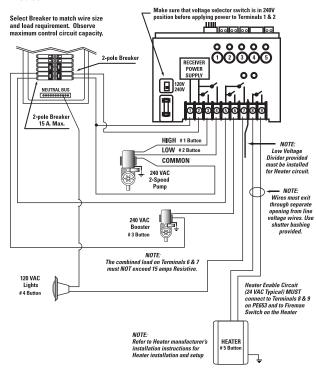
# Common PE30000RC Applications

# PE30065RC Applications

# 240 V 2-Speed Pump + any three 240 VAC Auxiliary Equipment

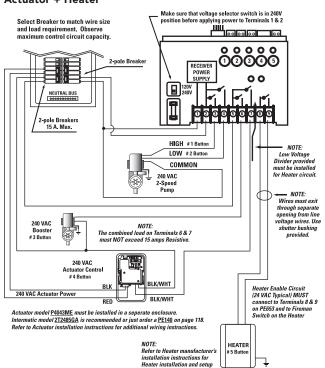


# 240 V 2-Speed Pump + Booster Pump + 120 V Light + Heater

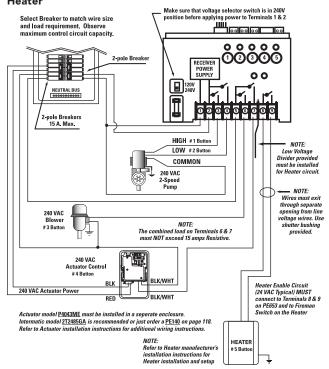


# PE34065RC Applications

### 240 V 2-Speed Pump + 240 V Booster Pump + 240 V Actuator + Heater



# 240 V 2-Speed Pump + 240 V Blower + 240 V Actuator + Heater



# P1353ME Digital Two-Speed Controller Mechanism



### P1353ME

# **Specifications:**

- Three individual circuits
- Three ON/OFF events per day per circuit
- Seven pre-programmed modes for common pool & spa applications
- Input voltage 120, 208, 240 VAC
- Memory backup
- Freeze protection
- Heater protection (fireman switch)
- LCD readout
- Shipping weight: 3 lbs (1.4 kg)
- Agency approval: CSA/C-US

# CONTACT RATINGS — EACH CIRCUIT, ALL MODES

- 17 Amp Resistive, 120, 240 VAC, 50/60 Hz
- (20 FLA, 96 LRA) 120 VAC, 50/60 Hz
- (17 FLA, 80 LRA) 240 VAC, 50/60 Hz
- 5 Amps Tungsten, 120, 240 VAC, 50/60 Hz
- 5 Amps Ballast, 120, 240 VAC, 50/60 Hz







# P1353ME

# Three Circuit Clock Mechanism

Designed as an upgrade to your T100 Series time switch, the P1353ME mechanism can be installed into almost any Intermatic enclosure and has the ability to program up to three circuits. Choose between seven pre-programmed modes of operation, which include single speed pump or 2-speed pump/cleaner pump combinations. In addition, programmed modes that include auxiliaries can control pumps up to 3 HP as well as underwater, landscape and/or fountain lighting. Countdown and Override features allow cycle interruptions when pool/spa service is required. All timing and protection associated with filter pump/cleaner pump combinations and two-speed pumps has already been integrated into the software.

# **Pre-Programmed Equipment Pad Modes**

### Mode 1 - (Aux1, Aux2, Aux3)

The time switch is a 3-circuit switch with all three switches controlling auxiliary devices.

### Mode 2 - (Pump High, Pump Low, Aux3)

The time switch is a 2-circuit switch with the 1st & 2nd switch controlling a twospeed pump. The 3rd switch is controlling any auxiliary device. All protection associated with a two speed pump is pre-programmed into this mode.

# Mode 3 - (Pump, Aux2, Cleaner Pump)

The time switch is a 3-circuit switch with the 1st switch controlling a single speed pump, the 2nd switch controls any auxiliary device, and the 3rd switch operates a booster/cleaner pump. All timing & protection associated with a filter pump/cleaner pump combination is pre-programmed into this mode.

### Mode 4 - (Pump High, Pump Low, Cleaner Pump)

The time switch is a 2-circuit switch with the 1st & 2nd switch controlling a 2-speed pump. The 3rd switch is controlling a booster/cleaner pump. All protection associated with a 2-speed pump and booster/cleaner pump combination is pre-programmed into this mode.

# Mode 5 - (Pump L1, Pump L2, Aux3)

The time switch is a 2-circuit switch with the 1st & 2nd switch controlling a 240V pump, where both L1 & L2 are required to be disconnected when the pump is OFF. The 3rd switch is controlling any auxiliary device.

# **New Pre-Programmed Equipment Pad Modes**

# Mode 6 – (Aux1, Aux2, Aux3)

### Heater green mode

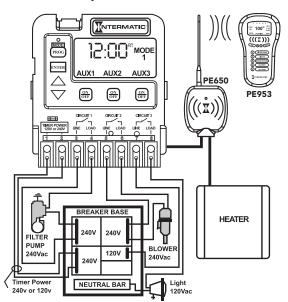
The time switch performs identical to Mode 1 except this mode allows the heater to heat the water only when Circuit 1 (the filter pump) is manually turned on – not when the clock turns the pump on. This mode is helpful when you have Circuit 1 connected to a circulation pump in a spa. When the spa is not in use, the clock circulates the water to filter it, but does not turn ON the heater. When the spa is in use, the heater is also turned ON by manually switching Circuit 1 ON.

# Mode 7 – (Pump High, Pump Low, Common) Break both lines

The time switch performs identical to Mode 2 except this mode allows the hook up to break both hot lines of a 240VAC two speed pump connection. In this mode the time switch becomes a single circuit device specifically designed to control a two-speed pump motor. The 1st & 2nd circuits connect to the High and Low lines of the two-speed pump respectively and the 3rd circuit connects to the second hot leg. All timing & protection associated with a two-speed pump is pre-programmed into this mode.

# P1353ME Mode Applications 3 Circuit Pre-Programmed Options

Setting up the P1353ME Series 3-circuit timer is easy. Intermatic has already pre-programmed the most popular pool/spa/auxiliary combinations for your convenience. Just choose the mode that best suits your needs!



### Mode 1 – (Aux1, Aux2, Aux3)

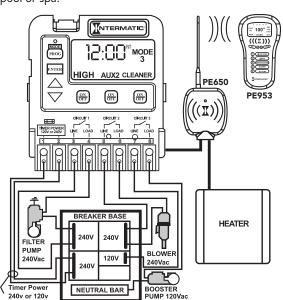
Each of the three single pole circuits are defined generically, and can control any load within each of its individual circuit ratings. All three circuits act independent of each other.

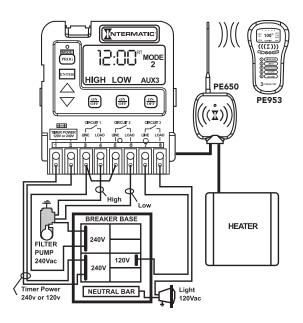
Applications: In Mode 1, the P1353ME Three Circuit Clock Mechanism is ideal for pool or spa only applications where each piece of equipment is independently controlled. With the addition of a PE650 Receiver and PE953 Transmitter, you can easily add wireless control to your equipment and thermostat control to your pool or spa. Each of the three circuits is rated for up to 3 HP and can handle both 120 VAC and 240 VAC equipment loads. This is the most versatile timer in the market today and can be added to almost all Intermatic control panels, both new and existing, making it ideal for upgrades to older Intermatic systems.

# Mode 2 - (Pump High, Pump Low, Aux3)

Circuits one and two are dedicated single pole outputs for a two-speed pump load. Circuits one and two will never be ON at the same time, consistent with a two-speed pump application. Circuit three is a single pole circuit for a generic load, and independent of circuits one and two.

**Applications:** In Mode 2, the P1353ME Three Circuit Clock Mechanism acts as a Two Speed Controller and can be used for two speed pool applications but is ideal for spa applications where the filter pump on the spa is used for filtering in low speed and used for jets in high speed. The remaining circuit can be used for spa lights or blower. With the addition of a PE650 Receiver and PE953 Transmitter, you can easily add wireless control to your equipment and thermostat control to your pool or spa.





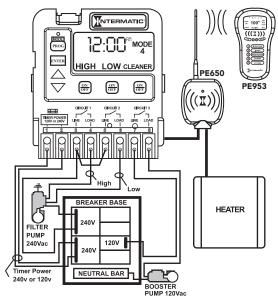
### Mode 3 - (Pump, Aux2, Cleaner Pump)

Circuits one and three are dedicated single pole outputs for a single speed pump working with a pressure side cleaner pump. Circuit three will never come ON unless circuit one is ON for at least one minute, consistent with a pressure side cleaner pump. Circuit two is a single pole circuit for a generic load, independent of circuits one and three.

**Applications:** In Mode 3, the P1353ME Three Circuit Clock Mechanism is ideal for pool applications where a Booster/Cleaner pump is being controlled. In this mode, if the Filter Pump is OFF, the Booster/Cleaner pump will activate the Filter Pump first and then turn itself ON when activated. This ensures adequate priming of the Booster/Cleaner pump. The remaining circuit can be used for lights. With the addition of a PE650 Receiver and PE953 Transmitter, you can easily add wireless control to your equipment and thermostat control to your pool.



# P1353ME Mode Applications 3 Circuit Pre-Programmed Options Continued



# Mode 4 – (Pump High, Pump Low, Cleaner Pump)

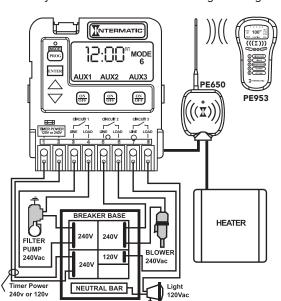
Circuits one and two are dedicated single pole outputs for a two-speed pump load. Circuits one and two will never be ON at the same time, consistent with a two-speed pump application. Circuit three is also a dedicated single pole output for a pressure side cleaner pump. Circuit three will never come ON unless circuit one is ON for at least one minute, consistent with a pressure side cleaner pump.

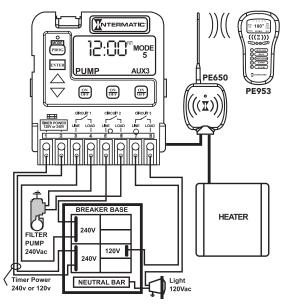
**Applications:** In Mode 4, the P1353ME Three Circuit Clock Mechanism acts as a Two Speed Controller and is ideal for pool applications where a booster/cleaner pump is being controlled. In this mode, if the filter pump is OFF or in low speed, the booster/cleaner pump will activate the filter pump in high speed first and then turn itself ON when activated. This ensures adequate priming of the booster/cleaner pump. With the addition of a PE650 Receiver and PE953 Transmitter, you can easily add wireless control to your equipment and thermostat control to your pool.

# Mode 5 - (Pump, Pump, Aux3)

Circuits one and two are now coupled together making one circuit capable of switching the power source to one pump. The ON/OFF button for circuit one now controls both circuit one and two simultaneously. The ON/OFF button for circuit two is disabled. Circuit three remains a single pole circuit for a generic load, and is independent of circuits one and two.

**Applications:** In Mode 5, the P1353ME Three Circuit Clock Mechanism acts as a two circuit clock to allow the breaking of both hot legs in a 240 VAC equipment hookup on circuit #1. Even though the P1353ME is not a disconnect, and you can easily control a 240 VAC load by breaking only one leg, some wiring situations may dictate breaking both legs of a 240 VAC load. It is good service practice to always open the equipment circuit breaker and red tag it appropriately when working on pool or spa equipment. When working on equipment, DO NOT rely on any clock to disconnect power. The clock may be scheduled to turn ON during servicing.





### Mode 6 – (Aux1, Aux2, Aux3)

Identical to Mode 1, in which each of the three single pole circuits are defined generically and can control any load within each of its individual circuit ratings, with all three circuits acting independent of each other. However, with Mode 6, the fireman switch closes only when Circuit 1 (the filter pump) is manually turned ON, not when the clock turns it ON. This mode is useful when you have Circuit 1 connected to a circulation pump in the spa. When the spa is not in use, the clock circulates the water to filter it, but does not turn ON the heater. When the spa is in use, the heater is also turned ON by manually switching Circuit 1 ON.

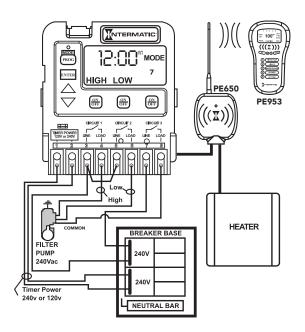
**Applications:** In Mode 6, the P1353ME Three Circuit Clock Mechanism is ideal for spa applications where you need to control three pieces of individual equipment (circulation pump, blower, light), but do not want to heat the spa while it's not in use.

# P1353ME Mode Applications 3 Circuit Pre-Programmed Options Continued

# Mode 7 - (Pump High, Pump Low, Aux3)

Circuits one and two are dedicated single pole outputs for a two-speed pump load. Circuits one and two will never be ON at the same time, consistent with a two-speed pump application. Circuit three is a single pole circuit tied to circuits one and two and used to control the common line of the two speed pump. In Mode 7, all three circuits are used to control the two speed pump and break both legs of a 240 Volt pump installation.

**Applications:** In Mode 7, the P1353ME Three Circuit Clock Mechanism acts as a two speed controller and can be used for two speed pool applications but is ideal for spa applications where the filter pump on the spa is used for filtering in low speed and used for jets in high speed. The remaining circuit is used to open the second hot leg of a 240 Volt two speed installation when the pump is turned to the OFF position. With the addition of a PE650 Receiver and PE953 Transmitter, you can easily add wireless control to your equipment and add thermostat control to your pool or spa.



# P4000ME Series Actuator Controller & Load Mechanisms

# **P4000ME Series**

# **Actuator Control & Load Mechanisms**

# **Specifications:**

- 120, 208, 240 VAC input voltage
- Controls up to three valve actuators
- Switches heater thermostat
- Remote control capabilities
- Agency approval: CSA/C-US
- Controls two circuits (P4243ME only)

# Contact Ratings - Each Circuit

- Valve Actuator Supply: 24 VAC, 40 VA
- 17 Amp Resistive, 120-240 VAC, 50/60 Hz (P4243ME only)
- 1.5 HP, 120 VAC, 50/60 Hz (P4243ME only)
- 3.0 HP, 240 VAC, 50/60 Hz (P4243ME only)
- 10 Amp Tungsten, 120, 240 VAC, 50/60 Hz (P4243ME only)

### P4043ME - Valve Actuator Control Mechanism

Have you ever wanted an affordable control that would only automate a set of water valves from the pool position to the spa position? Or maybe just turn a single water valve to engage a water feature?

Designed specifically for aftermarket and retro-fit applications, the P4043ME is ideal for controlling up to three water valve actuators with any latching or momentary contactor (not provided) capable of providing 120 VAC or 240 VAC. In addition, the P4043ME can switch the thermostat on most heaters between pool and spa when the actuators change position.

The P4043ME is ideal for those applications where only simple water valve control is required and can be triggered by any switching device you may provide (i.e. light switch, spring wound AUTO/OFF, wireless switch, relay, etc...). Installation is easy! Simply snap the P4043ME into any existing Intermatic enclosure that contains an available mechanism support bracket, hook up power to both the P4043ME and the trigger device, and plug in your 24 VAC water valve actuators behind the top door of the mechanism.

# PE140 - Valve Actuator Control

If you do not have an Intermatic enclosure, you can order the PE140 model which contains the P4043ME mechanism and the appropriate low voltage hardware for running your actuator cables.

# P4243ME - Valve/Pump Switch Mechanism

Designed as part of the I-Wave system and for aftermarket and retro-fit applications, the P4243ME does everything a P4043ME does and is most suited for controlling up to two different circuits associated with pool/spa combinations. It can also be used to control all the equipment typically needed in connection with water features, solar heating and other similar applications. This unit snaps into almost any Intermatic enclosure and controls pumps up to 3HP, 24 volt supply for up to three valve actuators, automatic HIGH/LOW water temperature selector, heater connection circuit and push button control for each load with indicator lights on the face of switch. In addition, the unit has connections for a hard wired or wireless remote and a master switch controller.



P4043ME





P4243ME



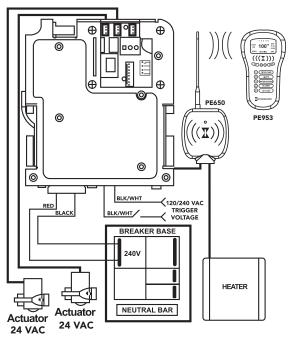




Note: The following page refers to only a fraction of the most common applications of the Multi-Wave Control System. Contact your Intermatic sales representative or visit www.intermatic.com and visit the Pool & Spa section of our website for more application ideas and details.

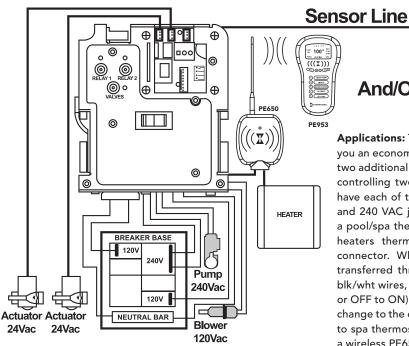
# P4000ME Series Actuator Controller & Valve/Pump Switch Applications

# **P4043ME Application**



Applications: The P4043ME Actuator Control Mechanism gives you an economical way to control up to three valve actuators with either a simple aftermarket switch, a sophisticated PE650/PE953 wireless control or both. In the example, we illustrate controlling two valve actuators most commonly found in a fountain control, solar control or pool/spa control system. This device is also capable of switching a pool/spa thermostat on a remote heater by wiring the remote heaters thermostat pool/common/spa wires to the onboard connector. When a 120 VAC or 240 VAC trigger voltage is transferred through the aftermarket switch to the mechanism's blk/wht wires, the valve actuators and heater thermostat will change to the opposite position, (i.e. pool to spa, pool thermostat to spa thermostat), and back again once the switch is opened. If a wireless PE650/PE953 combination is added to the mechanism, a wireless full thermostat control system along with actuator control would now be available.

# P4243ME Application



And/Or Standard
SPST Switch

Applications: The P4243ME Valve/Pump Switch Mechanism gives you an economical way to control up to three valve actuators and two additional 120 VAC or 240 VAC loads. The example, illustrates controlling two valve actuators on a pool/spa combination and have each of the available loads wired to a 240 VAC spa blower and 240 VAC jet pump. This device is also capable of switching a pool/spa thermostat on a remote heater by wiring the remote heaters thermostat pool/common/spa wires to the onboard connector. When a 120 VAC or 240 VAC trigger voltage is transferred through the aftermarket switch to the mechanisms blk/wht wires, each of the loads will change state, (i.e. ON to OFF or OFF to ON) and the valve actuators and heater thermostat will change to the opposite position, (i.e. pool to spa, pool thermostat to spa thermostat), and back again once the switch is opened. If a wireless PE650/PE953 combination is added to the mechanism, a wireless full thermostat control system along with actuator control and individual load control would now be available.



# Wireless & Remote **Control Accessories**

# **I-Wave Remote Controls Panel-Mounted Transceiver** (PE650) with Antenna (PA118)



Utilizing ground breaking Z-Wave® technology, Intermatic's Wireless Panel-Mounted Transceiver and Hand-Held Transceiver provide reliable two-way communication and long range ability that is unmatched by any other wireless protocols.

The main function of the Panel Mounted Transceiver is to take commands from the Wireless Hand Held Transceiver (PE953) and hand them off to two mechanisms (P1353ME and/or P4243ME).

### This unit can control:

- One P1353ME and one P4243ME
- One or two P1353ME units
- One or two P4243ME units
- •Gas or electric heater thermostat

In cases where the two devices are too far apart for direct communication you can also purchase a (PA121) 35-ft. Antenna Extension Cable Assembly when structures impede transmissions between the Panel Mounted Transceiver and Hand Held Transceiver.

# **Wireless Hand-Held Transceiver (PE953)**

The primary function of the PE953 Multi-Wave wireless hand-held controller is to both transmit user commands and receive equipment data from a variety of different devices, including the PE650, PE653, specific OEM equipment and any Z-Wave compatible transceiver device. The PE953 is an all-in-one multitasking controller capable of communicating with all the above devices by toggling the screens on the controller to the appropriate device. With the addition of the new backlit display and improved features; the new PE953 Multi-Wave controller replaces the I-Wave PE950 controller.

### Features:

- Waterproof
- Replaces the PE950
- Backlit LCD display
- User friendly programming
- Improved programming capabilities
- New Z-Wave home automation features
- Controls the PE650, PE653, specific OEM equipment & Z-Wave devices
- Z-Wave certified capable of communicating with any Z-Wave certified devices

# **Three-Button Wired Remote Control** (133PE1484A)

The Three-Button Wired Remote Control 133PE1484A plugs into either the Three-Circuit Clock P1353ME or Valve/Pump Switch P4243ME and is normally installed as a spa-side remote. Most often the remote controls the filter pump, jets and lights, plus includes indicator lights on the face of the button. When installed as part of a system, it replaces the wireless method of controlling the three circuits within the mechanism. The Three-Button Wired Remote Control can also be installed where a third mechanism is needed in the enclosure, since the Wireless Hand-Held Transceiver (PE953) can only control two mechanisms.



**PE650** 

**PE953** 



133PE1484A

# **Control Accessories**

# I-Wave Accessories Antenna (PA118)

The Intermatic Antenna PA118 installs on the top of the PE650 I-Wave receiver. All PE650 I-Wave receivers come with the antenna so you would only require a PA118 for replacement purposes. Only a PA118 antenna will work with the PE650 I-Wave Receiver.

# Water Temperature Sensor (PA122)

The Intermatic Water Temperature Sensor PA122 installs in the inlet side of the heater and monitors both pool and spa water temperature, depending on the position of the diverter valves. Installation is necessary for the thermostatic control to work. The sensor plugs into the Panel-Mounted Transceiver PE650 and the water temperature is displayed on the Hand-Held Transceiver PE953.

# Freeze (Air Temperature) Sensor (178PA28A)

Add the Intermatic Freeze or Air Temperature Sensor 178PA28A to installations where below-freezing outdoor temperatures are a concern. The sensor is designed to protect the pool and spa equipment and plumbing against freeze damage. The sensor plugs into the circuit board on the back of the P1353ME and turns ON the filter pump when air temperature drops below the programmed temperature. The freeze programming mode will not appear unless the sensor is plugged into the clock.

# 35-ft. Antenna Extension Cable Assembly (PA121)

When a structure impedes transmission between the Panel-Mounted Transceiver PE650 and Handheld Transceiver(s) PE953, you can use the 35-ft. Antenna Extension Cable Assembly PA121 to relocate the antenna from the Panel-Mounted Transceiver to the area of operation, ensuring that communication between the Hand-Held unit and the control center is successful.

Model #	Description	Case Qty.	Case Weight
PE650	Panel mounted transceiver	1	5.5 lbs. (2.5 kg)
PE953	Wireless hand held transceiver	1	5.5 lbs. (2.5 kg)
133PE1484A	Three-button wired remote control	1	3.1 lbs. (1.4 kg)
PA118	Antenna	1	0.2 lbs. (0.1 kg)
PA122	Water temperature sensor	1	0.3 lbs. (0.1 kg)
178PA28A	Freeze sensor	1	0.3 lbs. (0.1 kg)
PA121	Antenna extension	1	3.0 lbs. (0.1 kg)
PA120	Relay – DPST, 24 VAC coil	1	0.4 lbs. (0.2 kg)
143T145A	Relay – DPST, 24 VDC coil	1	0.4 lbs. (0.2 kg)





# PE100 Series Digital Two-Speed Controls



# PE100 Series P1353ME & NEMA 3R Enclosure with Available Options

- For 1 and 2-speed pumps
- Controls 3 circuits
- 3 ON/OFF events per day
- 7 pre-programmed combinations to choose from
- Add on other pool/spa related devices

See pages 14-17 for specifications on P1353ME

# **Applications:**

- Single Speed Pump/Booster Pump Combos
- Two-Speed Pump/Booster Pump Combos
- Pool & Spa Lighting

- Water Features
- Gardens & Fountains

Clack Supply

• Landscape Lighting

## **Specifications:**

**Enclosure:** NEMA 3R rated for Indoor/Outdoor installation in beige finish "P" suffix models are same dimensions, except made from outdoor grade plastic.  $9\frac{3}{8}$  in. (23.8 cm) H x  $5\frac{1}{2}$  in. (14.0 cm) W x  $3\frac{5}{8}$  in. (9.2 cm) D

**Knockouts:** Combination  $\frac{1}{2} - \frac{3}{4}$  in. nominal knockouts, one on back and each side of

enclosure and two on bottom

**Switch Rating (each circuit):** 20 Amp Resistive, 120-240 VAC, 50/60 Hz; (20 FLA, 96 LRA), 120 VAC, 50/60 Hz; (17 FLA, 80 LRA), 240 VAC, 50/60 Hz; 5 Amp Tungsten, 120-240 VAC, 50/60 Hz; 5 Amp Ballast, 120-240 VAC, 50/60 Hz

**Shipping Weight:** 3.7 lbs (1.7 kg) **Agency Approval:** CSA/C-US

Model #	Description	Switch	Volts 50/60 Hz
PE153	Digital Time Clock in Metal Enclosure	3 - SPST	120, 240
PE153F	Digital Time Clock in Metal Enclosure with Freeze Protection Probe	3 - SPST	120, 240
PE153P	Digital Time Clock in Plastic Enclosure	3 - SPST	120, 240
PE153PW	Digital Time Clock in Plastic Enclosure with 100' Wired Remote Command	3 - SPST	120, 240
PE153PF	Digital Time Clock in Plastic Enclosure with Freeze Protection Probe	3 - SPST	120, 240
PE153PWF	Digital Time Clock in Plastic Enclosure with 100' Wired Remote Command & Freeze	3 - SPST Protection Pr	120, 240 obe
PE153RC	Digital Time Clock in Metal Enclosure with Wireless Remote Command & Heater Co	3 - SPST ontrol	120, 240

Note: See page 20-21 for PE650 and PE953 specifications and pages 14-17 for P1353ME specifications.

# PE10000 Series Digital Two-Speed Controls

# PE10000 Series Digital Pool or Spa Control Centers

For pool, spa or water feature applications, the PE Series Digital Controls include one P1353ME mechanism that controls a total of three timed circuits, including single speed or two-speed filter pumps, pool lights, spa lights and landscape lights. Countdown and override features allow programs to be interrupted for service and automatically resumed without reprogramming your system.

# **Applications:**

- Single Speed Pump/Booster Pump Combos Water Features
- Two-Speed Pump/Booster Pump Combos Gardens & Fountains
- Pool & Spa Lighting
   Landscape Lighting

## **Specifications:**

**Enclosure:** 0.048 in. steel with electrostatically applied light beige finish.  $14\frac{3}{4}$  in. (37.5 cm) H x  $14\frac{3}{4}$  in. (37.5 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Knockouts:** One 1.09 in. diameter through hole, three  $^{1}/_{2}$  in. knockouts, seven combination  $^{1}/_{2} - ^{3}/_{4}$  in. knockouts, and two combination  $^{3}/_{4} - 1$  in. knockouts on the bottom. Two combination  $^{1}/_{2} - ^{3}/_{4}$  in. on the left side and one combination  $^{3}/_{4} - 1$  in. and one combination  $^{1}/_{2} - ^{3}/_{4}$  in. on the back. One knockout  $^{13}/_{4} \times ^{23}/_{4}$  in. on the right side for mounting switches or GFCI

Switch Rating: P1353ME – See page 14

**Shipping Weight:** See table **Agency Approval:** CSA/C-US

Model #	Description/Mechanism	Switch	Volts 50/60 Hz	Shipping Weight
PE10000	None	None	120, 240	16.3 lbs (7.4 kg)
PE15300	P1353ME	3-SPST	120, 240	17.2 lbs (7.8 kg)
PE15300F	P1353ME w/Freeze Probe	3-SPST	120, 240	17.2 lbs (7.8 kg)

Clack Supply

Upgrade Solution & Options: Wireless – Add PE650 & PE953 (see page 20-21)





# PE20000 Series Digital Two-Speed Controls Pool or Spa-Wave







PE25300F



# **PE20000 Series**Digital Pool or Spa Control Panels

For pool, spa or water feature applications, the Pool or Spa-Wave PE20000 Series Wireless Control System includes one P1353ME mechanism that controls a total of three timed circuits, including single speed or two-speed filter pumps, cleaner/booster pumps, pool lights, spa lights and landscape lights. Countdown and override features allow programs to be interrupted for service and automatically resumed without reprogramming your system.

# **Applications:**

- Single Speed Pump/Booster Pump Combos
- Two-Speed Pump/Booster Pump Combos
- Water Features

- Pool & Spa Lighting
- Gardens & Fountains
- Landscape Lighting

### **Specifications:**

**Enclosure:** 0.048 in. steel with electrostatically applied light beige finish  $16\frac{1}{2}$  in. (41.9 cm) H x  $10\frac{7}{8}$  in. (27.6 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Knockouts:** One 1.09 in. diameter through hole, six combination  $\frac{1}{2} - \frac{3}{4}$  in. knockouts, and three combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. Two combination  $\frac{1}{2} - \frac{3}{4}$  in. on the left side and one combination  $\frac{3}{4} - 1$  in. on the back. One knockout  $\frac{13}{4} \times \frac{23}{4}$  in.

on the right side for mounting switches or GFCI

Panel Rating: 60 Amp, 120, 240 VAC or 120, 208 VAC single phase

Switch Rating: P1353ME - See page 14

Agency Approval: CSA/C-US

Model #	Description/ Mechanism	Switch	Clock Supply Volts 60 Hz	Shipping Weight
PE20000	None	None	120, 240	14.3 lbs (6.5 kg)
PE25300	P1353ME	3 - SPST	120, 240	18.3 lbs (8.3 kg)
PE25300F	P1353ME w/Freeze Probe	3 - SPST	120, 240	18.3 lbs (8.3 kg)
PE25300RC	P1353ME w/Wireless Remote Command and Heater Control	3 - SPST	120, 240	19.3 lbs (8.8 kg)

Note: See page 20-21 for PE650 and PE953 specifications and page 14-17 for P1353ME specifications.

# Upgrade Options: Wireless - Add PE650 & PE953 (see page 20-21)

# PE30000 Series Digital Controls Mini I-Wave

# PE30000 Series Digital Pool or Spa Control Panels

For pool, spa or water feature applications, the Mini I-Wave Series Digital Controls includes one P1353ME mechanism that controls a total of three timed circuits, including single-speed or two-speed filter pumps, cleaner/booster pumps, pool lights, spa lights and landscape lights. Countdown and override features allow programs to be interrupted for service and automatically resumed without reprogramming your system.

# **Applications:**

- Single Speed Pump/Booster Pump Combos
- Two-Speed Pump/Booster Pump Combos
- Water Features

- Pool & Spa Lighting
- Gardens & Fountains

Clask Supply

• Landscape Lighting

### **Specifications:**

Enclosure: 0.048 in. steel with light beige finish

22 in. (55.9 cm) H x  $14\frac{3}{4}$  in. (37.5 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Knockouts:** One 1.09 in. diameter through hole, six combination 1/2 - 3/4 in. knockouts, 2 combination 3/4, 1, 11/4 in. knockouts, four 1/2 in. knockouts on the bottom. Two combination 1/2 - 3/4 in. knockouts on the left side and four combination 1/2 - 3/4 in. knockouts, two combination 3/4 - 1 in. on the back. One knockout  $13/4 \times 23/4$  in. on the right side for mounting switches or GFCI

Panel Rating: 80 Amp, 120, 240 VAC or 120, 208 VAC single phase

Switch Rating: P1353ME - See page 14

**Shipping Weight:** See table **Agency Approval:** CSA/C-US

Model #	Description/Mechanism	Switch	Volts 50/60 Hz	Weight
PE30000	None	None	120 or 240	16.3 lbs (7.4 kg)
PE35300	P1353ME	3-SPST	120 or 240	19.0 lbs (8.6 kg)
PE35300RC	P1353ME	3-SPST	120 or 240	29.0 lbs (13.2 kg)
	w/Wireless Remote			
Command 8	k Heater Control			
PE35343RC	P1353ME & P4243ME	3-SPST	120 or 240	38.0 lbs (17.3 kg)
	w/Wireless Remote Comm	nand,		
	Heater Control & Two	2-DPST		
	PE24VA Valve Actuators	3–Actuators	S	
Note: See n	age 20-21 for PE650 and PE	953 specificat	ions and nage 1/	1-17 for P1353ME

Note: See page 20-21 for PE650 and PE953 specifications and page 14-17 for P1353ME specifications.





NTERMATIC.



# PE40000 Series Digital Controls I-Wave













# PE40000 Series

# **I-Wave Wireless Pool/Spa Control Panels**

For pool, spa or water feature applications, the I-Wave Series Digital Controls includes one P1353ME mechanism that controls a total of three timed circuits, including single speed or two-speed filter pumps, cleaner/booster pumps, pool lights, spa lights and landscape lights. Countdown and override features allow programs to be interrupted for service and automatically resumed without reprogramming your system.

For pool/spa combinations or pool/water feature combinations, the PE45343RC includes all the features of the PE Series Digital Controls plus two PE24VA valve actuators, Wireless Panel-Mounted Transceiver PE650 and Hand-Held Transceiver PE950 which allows the system to display the status of each of the five circuits (3 timed and 2 on-demand), pool and spa water temperature, pool and spa thermostat set point, heating status and overall communication status.

## **Applications:**

- Pool/Spa Combinations
- Pool/Water Feature Combinations
- Pool/Spa Lighting

- Water Features
- Fountains
- Landscape Lighting

### Specifications:

**Enclosure:** 0.048 in. steel with electrostatically applied light beige finish

26.0 in. (66.3 cm) H x 18.0 in. (45.9 cm) W x 5.5 in. (14.0 cm) D

**Knockouts:** Two combination 3/4-1-11/4 in. and eleven combination 1/2-3/4 in. knockouts on the bottom. Two 3/4-1 in. combination and four combination 1/2-3/4 in. knockouts on the back. Low voltage compartment has two combination 1/2-3/4 in. knockouts and one 3/4 in. hole with a shutter bushing installed. Two combination 3/4-1 in. and one combination 1/2-3/4 in. knockouts. One  $13/4\times23/4$  in. knockout on the right

**Panel Rating:** 125 Amp, 120, 240 VAC or 120, 208 VAC single phase **Switch Rating:** P1353ME (page 14) and P4243ME (pages 18-19)

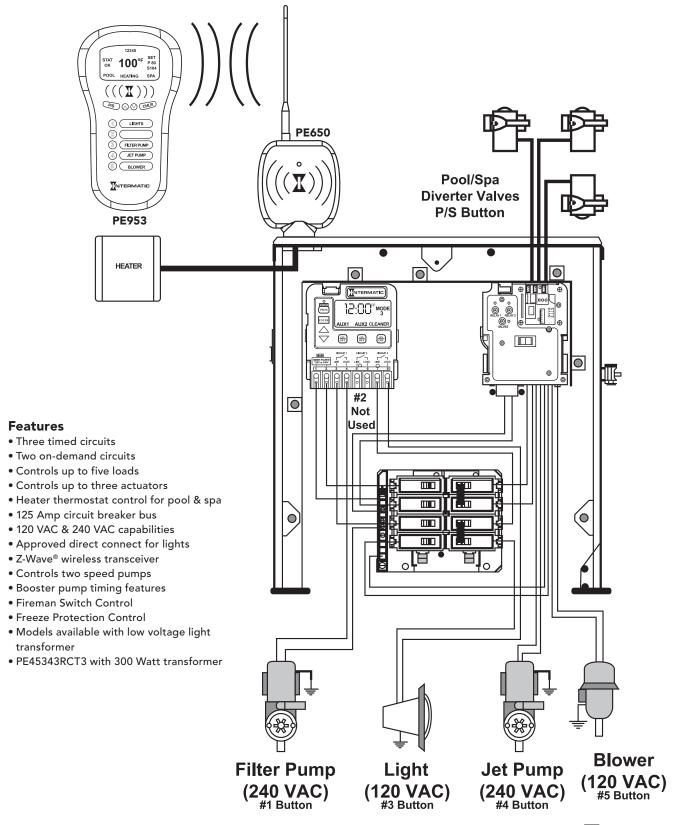
**Shipping Weight:** See Table **Agency approval:** CSA/C-US

Agency approval. C3A/C-03						
Model #	Mechs/ Description	Circuits	Transformer	Volts 50/60 Hz	Shipping Weight	
PE40000	None	None	None	120, 240	42.0 lbs. (19.1 kg)	
PE45300	P1353ME	3 – SPST	None	120, 240	44.0 lbs. (19.8 kg)	
PE45343RC	P1353ME w/Wireless Remote Command, Heater Control 2 & (2) Actuators	3 – SPST 2 – DPST – Actuator	None s	120, 240	52.0 lbs. (23.6 kg)	
PE45343RCT3	P1353ME w/Wireless Remote Command, Heater Control 2 & (2) Actuators w/300 Watt 12 V Transformer	3 – SPST 2 – DPST – Actuator	300 Watt	120, 240	61.0 lbs. (27.5 kg)	

Note: See page 20-21 for PE650 and PE953 specifications, page 14-17 for P1353ME, page 18-19 for P4243ME specifications and page 48 for PE24VA Valve Actuator specifications.

# PE40000 Series Digital Control Applications

# I-Wave Application PE45343RC & PE45343RCT3





# PE1500RC Series Digital Controls Mini-Wave

# **PE1500RC Series**Mini-Wave Wireless Pool/Spa Control Panels

For pool/spa combinations or pool/water feature combinations, the PE1541RC includes a PB313E one circuit electronic timer for controlling the filter pump, two PE24VA valve actuators, Wireless Panel Mounted Transceiver PE650 and Hand-Held Transceiver PE950, which allows the system to display the status of each of the four on-demand circuits, pool and spa water temperature, pool and spa thermostat set point, heating status and overall communication status. PE1501RC does not include actuators and is designed for pool or spa applications.

# **Specifications:**

Panel Rating: 100 Amp, 120, 240 VAC or 120, 208 VAC single phase

Switch Rating: 17 Amp Resistive, 120, 240 VAC, 50/60 Hz; 1.5 HP, 120 VAC, 50/60 Hz;

3.0 HP, 240 VAC, 50/60 Hz; 10 Amp Tungsten, 120, 240 VAC, 50/60 Hz

**Shipping Weight:** 24.3 lbs. (10.9 kg) **Agency Approval:** CSA/C-US

Model #	Timer	Circuits	Actuators	Switch	Volts 50/60 Hz
PE1541RC	PB313E	4	2	4 - DPST	120, 240
PE1501RC	PB313E	4	None	4 - DPST	120, 240

Note: See Page 20-21 for PE650 and PE953 specifications.



If you need to control a booster/cleaner pump, water feature or just require an additional circuit, the PA120 can be added as circuit #3 to your Mini-Wave Control Center. If used as a booster/cleaner pump relay, you will need to program your PE953 Wireless Hand-Held Transceiver to lock out the booster/cleaner pump whenever your valve actuators change from the pool position to the spa position. This relay requires a 24 VAC coil, not a 24 VDC coil like the remaining four relays.

# 143T145A (24 VDC Coil) Replacement Relay

The 143T145A is the replacement relay for the I-Wave, Mini-Wave or most any other competitors control system available on the market today. Capable of controlling up to a 3 HP motor, it has a 24 VDC coil, and comes equipped with a 10 in. red/black lead wire and two pin connector suitable for most control systems.

Model #	Description	Case Qty.	Case Weight
PA120	Relay – DPST, 24 VAC coil	1	0.4 lbs. (0.2 kg)
143T145A	Relay – DPST, 24 VDC coil	1	0.4 lbs. (0.2 kg)

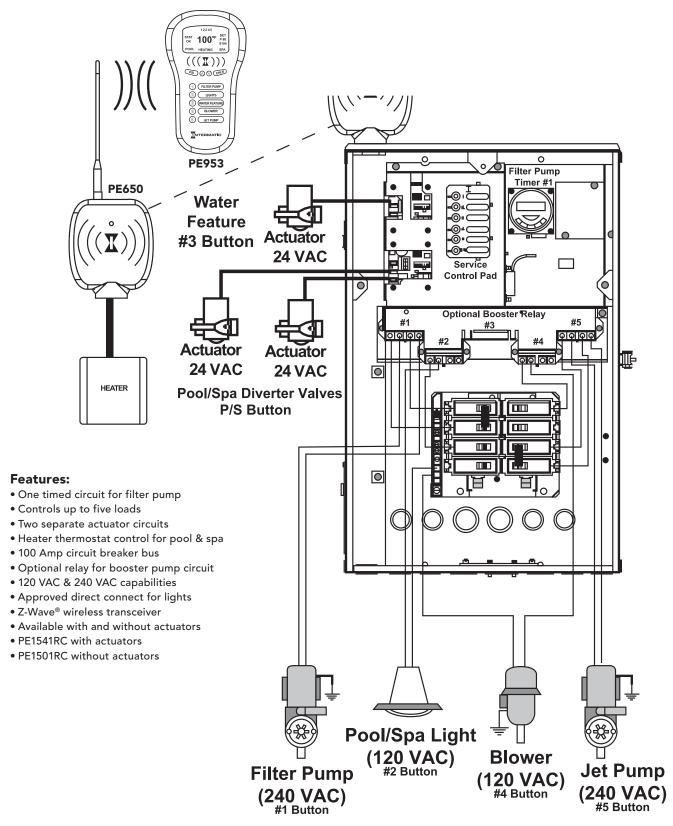






# PE1500RC Series Mini-Wave Applications

# Mini-Wave Application PE1541RC & PE1501RC





# T100 Series Mechanical Time Switch Mechanisms



# T104M

# The second secon

T104M201





# T100M Series 24 Hour Mechanical Time Switch Mechanisms

These heavy duty Time Switch Mechanisms are designed for commercial, industrial and residential applications, and have the highest motor load ratings in the industry. They provide up to 12 ON/OFF operations each day with minimum ON/OFF time of 1 hour. All models are equipped with ON and OFF trippers and can be installed in almost all Intermatic enclosures.

# **Applications:**

• Filter Pumps • Heat Pumps • Lighting

# **Specifications:**

**Switch Rating:** 40 Amp Resistive each pole, 120-480 VAC; 40 Amp Tungsten, Inductive or 1000 VA Pilot Duty each pole 120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC

Shipping Weight: See Table
Agency approval: CSA/C-US

Model #	Description/ Mechanism	Switch	Clock Supply Volts 60 Hz	Shipping Weight
T101M	Mechanism only	SPST	120	1.4 lbs (0.6 kg)
T102M	Mechanism only	SPST	208-277	1.4 lbs (0.6 kg)
T103M	Mechanism only	DPST	120	1.4 lbs (0.6 kg)
T104M	Mechanism only	DPST	208-277	1.4 lbs (0.6 kg)
T106M	Mechanism only for 2-speed pump applications	SPDT	208-277	1.4 lbs (0.6 kg)

# T100M201 Series

# 24 Hour Mechanical Time Switch Mechanism with Heater Protection

This Time Switch Mechanism provides coordinated control for heater and filter pump operations. It is designed to turn OFF a gas fired swimming pool heater approximately 20 minutes before the filter pump shuts down. This eliminates the problem of pounding and knocking due to overheated water, reduces scale and lime deposits and extends the service life of the heater. The 24-hour dial allows up to 12 ON/OFF operations each day. One set of ON and OFF trippers is supplied with each switch. Minimum ON/OFF time is one hour. Can be installed in almost all Intermatic enclosures.

### **Applications:**

• Pool and/or spa pumps with gas fired heaters

### Specifications:

**Switch Rating:** 40 Amp Resistive each pole, 120-480 VAC; 40 Amp Tungsten, Inductive or 1000 VA Pilot Duty each pole 120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC

Heater Control Circuit: 10 Amp, 240V. max

**Shipping Weight:** See Table **Agency approval:** CSA/C-US

Model #	Description/ Mechanism	Switch	Clock Supply Volts 60 Hz	Shipping Weight
T104M201	Mechanism only	DPST	208-277	1.4 lbs
	with heater protection			(0.6 kg)

# T100 Series Mechanical Time Switches

# T100 Series Pool/Spa Time Switches

These heavy-duty Mechanical Time Switches are designed for commercial, industrial and residential applications and have the highest motor load ratings in the industry. They provide up to 12 ON/OFF operations each day with a minimum ON/OFF time of 1 hour. All models are equipped with ON and OFF trippers and are available in either plastic or metal indoor/outdoor enclosure.

T104R201 and T104P201 Series Time Switches are designed to turn OFF a gas fired swimming pool heater approximately 20 minutes before the filter pump shuts down. This eliminates the problem of pounding and knocking due to overheated water, reduces scale and lime deposits and extends the service life of the heater.

## **Applications:**

Booster Pumps Lighting

• Fans • Air Conditioning

Hydro ChlorinatorsMusic and Signal Systems

• Heat Pumps • Swimming Pool and/or Spa Filter Pumps with Gas Fired Heaters

# **Specifications:**

**Enclosure:** NEMA 3R rated for Indoor/Outdoor installation. 0.034 in. drawn steel in beige finish

 $9\frac{3}{8}$  in. (23.8 cm) H x  $5\frac{1}{2}$  in. (14.0 cm) W x  $3\frac{5}{8}$  in. (9.2 cm) D

"P" models are the same as above, except made from outdoor grade plastic

**Knockouts:** Combination 1/2 - 3/4 in. nominal knockouts, 1 on back and each side of enclosure and 2 on bottom

Switch Rating: 40 Amp Resistive each pole, 120-480 VAC; 40 Amp Tungsten, Inductive or 1000 VA Pilot Duty each pole, 120-277 VAC; 2 HP (24 FLA) 120 VAC; 5 HP (28 FLA) 240 VAC

Heater Protection Circuit: 10 Amp, 240 V max

Agency Approval: CSA/C-US

Agency Approval: CSA/C-0S		وسي	Clock Supply	
Model #	Description	Switch	Volts 60Hz	
2T2485GA	Metal enclosure only	None	NA	
2T2502GA	Plastic enclosure only	None	NA	
2TP3352A	Plastic enclosure only with safety door	None	NA	
T101P3	Time switch in plastic enclosure	SPST	120	
T104P3	Time switch in plastic enclosure	DPST	208-277	
T101R3	Time switch in metal enclosure	SPST	120	
T101PCD82	Time switch in plastic enclosure w/see-through cover	SPST	125	
T103PCD82	Time switch in plastic enclosure w/see-through cover	DPST	125	
T104PCD82	Time switch in plastic enclosure w/see-through cover	DPST	125	
T104R3	Time switch in metal enclosure	DPST	208-277	
T101P201*	Time switch in plastic enclosure w/heater protection	SPST	120	
T104P201*	Time switch in plastic enclosure w/heater protection	DPST	208-277	
T101R201*	Time switch in metal enclosure w/heater protection	SPST	120	
T104R201*	Time switch in metal enclosure w/heater protection	DPST	208-277	

The heater protection switch (fireman switch) is closed when the time switch contacts are open to allow remote operation of the heater. A flow or pressure switch must always be part of the heater control circuit.

For additional trippers (1 ON/1 OFF per pack), order No. 156T1978A. For additional OFF trippers (25 OFF per pack), order No. PA115. Note: See page 30 for a detailed list of replacement mechanisms.





# T10000R Series Mechanical Controls









# T10000R Series Pool/Spa Control Centers

The T10000R Series Control Centers feature an all-weather enclosure and contain one or two heavy-duty timer mechanisms. In addition, they have provision to install switches or GFCI receptacle on the side and additional switches inside. The enclosure accepts any combinations of P1353ME, P4243ME, T100M, PF1000M Series mechanisms.

## **Applications:**

- Filter Pumps/Booster Pump Combinations
- •Landscape or HID Lighting

• Filter Pump/Light Controls

Signs

• Pool/Spa Combinations

## **Specifications:**

**Enclosure:** 0.048 in. steel with electrostatically applied light beige finish

12 in. (30.5 cm) H x 12 in. (30.5 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Knockouts:** Five combination  $\frac{1}{2} - \frac{3}{4}$  in. and two combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. One combination  $\frac{1}{2} - \frac{3}{4}$  in. on the left side and one combination  $\frac{3}{4} - 1$  in. on the back. One knockout  $\frac{1}{4} \times \frac{2}{4}$  in. on the right side for mounting switches or GECI

Center Rating: 92 Amp per leg, 168 Amp Max. 120-240 VAC or 120-208 VAC single

Time Switch Rating: 30 Amp Resistive/Inductive, Tungsten or 1000 VA Pilot Duty each pole 120, 208, 240 VAC; 2 HP (24 FLA), 120 VAC; 5 HP (28 FLA), 240 VAC

**Shipping Weight:** See Table **Agency Approval:** CSA/C-US

Description/ Model # Mechanism	Switch	Clock Supply Volts AC, 60 Hz	Shipping Weight
T10000R Enclosure Only	None	NA/NA	9.3 lbs (4.2 kg)
T10004R One T104M N	IA/DPST	NA/240	10.5 lbs (4.7 kg)
T10101R Two T101M SI	PST/SPST	120/120	11.0 lbs (5.0 kg)
T10404R Two T104M DI	PST/DPST	240/240	11.0 lbs (5.0 kg)
T10604R* T106M & T104M SF	PDT/DPST	240/240	11.0 lbs (5.0 kg)
T12404R** T104M201 & T104M DI	PST/DPST	240/240	11.0 lbs (5.0 kg)

- \* For 2 Speed Pump Applications.
- \*\* The heater protection switch (fireman switch) is closed when the time switch contacts are open to allow remote operation of the heater. A flow or pressure switch must always be part of the heater control circuit.

For additional trippers (1 ON 1 OFF per pack), order No. 156T1978A. For additional OFF trippers (25 OFF per pack), order No. PA115. For stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A. Note: See page 30 for a detailed list of replacement mechanisms.

# T20000R Series Mechanical Controls

# T20000R Series 60 Amp Pool/Spa Control Panels

The T20000R Series Control Panels features an all-weather enclosure and contain a 4 circuit breaker base, an equipment grounding bar and a mechanical time switch mechanism. The circuit breaker base accepts interchangeable type breakers made by a several manufacturers. In addition, the enclosure has provision for installing additional switches or GFCI receptacles on the side and inside.

# **Applications:**

• Filter Pumps • Lights • Ventilating Systems

• Signs • Air Conditioners • Heaters

## **Specifications:**

Enclosure: 0.048 in. steel with electrostatically applied light beige finish

 $16\frac{3}{4}$  in. (42.6 cm) H x  $8\frac{7}{8}$  in. (22.5 cm) W x  $4\frac{3}{8}$  in. (11.1 cm) D

**Knockouts:** Five combination  $\frac{1}{2} - \frac{3}{4}$  in. and three  $\frac{3}{4} - 1$  in. on the bottom, one combination  $\frac{1}{2} - \frac{3}{4}$  in. on the left side, one  $\frac{3}{4} - 1$  in. on the back and one combination  $\frac{1}{4} \times 2^{\frac{3}{4}}$  in. knockout on the right side for mounting switches or GFCI

Panel Rating: 60 Amp, 120, 240 VAC or 120, 208 VAC; Single Phase, 60 Hz Time Switch Rating: 30 Amp Resistive/Inductive, Tungsten or 1000 VA Pilot Duty each pole, 120, 208, 240 VAC; 2 HP (24 FLA), 120 VAC; 5 HP (28 FLA), 240 VAC

**Shipping Weight:** See table **Agency Approval:** CSA/C-US

Enclosure only	None	NA	11.2 lbs (5.0 kg)	
T101M	SPST	120	12.2 lbs (5.5 kg)	
T104M	DPST	240	12.2 lbs (5.5 kg)	
T104M	DPST	240	11.6 lbs (5.3 kg)	
	Enclosure only T101M T104M	Enclosure only         None           T101M         SPST           T104M         DPST	T101M         SPST         120           T104M         DPST         240	

<sup>\*</sup> T20004R has a limited availability, T21004R is the replacement model. For additional trippers (1 ON 1 OFF per pack), Order No. 156T1978A. For additional OFF trippers (25 OFF per pack), order No. PA115. For stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A. Note: See page 30 for a detailed list of replacement mechanisms.





# T30000R Series Mechanical Controls









# T30000R Series 100 Amp Pool/Spa Control Panels

The T30000R Series Control Panels reduce installation costs and provide all of the electrical requirements for any pool and/or spa installation. They offer an all-in-one electrical control center which can be custom wired for a wide variety of requirements, and eliminate the need for additional junction boxes and service panels. The enclosure accepts any combination of P1353ME, P4243ME, T100M, PF1000M Series mechanisms.

# **Applications:**

- Filter Pumps
- Booster Pumps
- Heating Systems
- s Lights

- Cleaning Systems
  - Security Systems
- Fountains
- Sprinkler Systems

• Landscape or HID Lighting

# **Specifications:**

**Enclosure:** 0.048 in. steel with electrostatically applied beige finish  $16\frac{1}{2}$  in. (41.9 cm) H x  $10\frac{7}{8}$  in. (27.6 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Knockouts:** Two  $\frac{1}{2}$  in., three combination  $\frac{1}{2} - \frac{3}{4}$  in., and two combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. Four  $\frac{1}{2}$  in., three combination  $\frac{1}{2} - \frac{3}{4}$  in. on the back. One combination  $\frac{3}{4} - 1$  in. on the left side. One  $\frac{1}{4} \times \frac{2}{4}$  in. knockout on the right side for mounting switches and GFCI

Panel Rating: 100 Amp, 120, 240 VAC or 120, 208 VAC single phase, 60 Hz. Time Switch Rating: 30 Amp Resistive/Inductive, Tungsten or 1000 VA Pilot Duty each pole, 120, 208, 240 VAC; 2 HP (24 FLA), 120 VAC; 5 HP (28 FLA), 240 VAC

**Shipping Weight:** See table **Agency Approval:** CSA/C-US

Model #	Description/ Mechanism	Switch	Clock Supply Volts AC, 60 Hz	Shipping Weight
T30000R5	Enclosure Only	None	NA/NA	15.5 lbs (7.0 kg)
T30004R	One T104M	None/DPST	NA/240	16.4 lbs (7.4 kg)
T30401R	T104M & T101M	DPST/SPST	240/120	17.3 lbs (7.8 kg)
T30404R	Two T104M	DPST/DPST	240/240	17.3 lbs (7.8 kg)
T30604R	T106M & T104M	SPDT/DPST	240/240	17.3 lbs (7.8 kg)
T32404R*	T104M201 & T104M	DPST/DPST	240/240	17.3 lbs (7.8 kg)

The heater protection switch (fireman switch) is closed when the time switch contacts are open to allow remote operation of the heater. A flow or pressure switch must always be part of the heater control circuit.

For additional trippers (1 ON 1 OFF per pack), order No. 156T1978A. For additional OFF trippers (25 OFF per pack), order No. PA115. For stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A. Note: See page 30 for a detailed list of replacement mechanisms.

# T40000R Series Mechanical Controls

# **T40000R Series**125 Amp Pool/Spa Control Panels

The T40000R Series Control Panels reduce installation costs and provide all of the electrical requirements for any pool and/or spa installation. They offer an all-in-one electrical control center which can be custom wired for a wide variety of requirements, and eliminate the need for additional junction boxes and service panels. The enclosure accepts any combination of P1353ME, P4243ME, T100M, PF1000M Series mechanisms.

# **Applications:**

- Filter Pumps
- Booster Pumps
- Heating Systems
- ns Lights
- Cleaning Systems Security Systems
- Fountains
- Sprinkler Systems

## **Specifications:**

**Enclosure:** 0.048 in. steel with electrostatically applied light beige finish  $20\frac{3}{4}$  in. (52.7 cm) H x  $12\frac{3}{4}$  in. (32.4 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Knockouts:** Seven combination  $\frac{1}{2} - \frac{3}{4}$  in. and three combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. Five combination  $\frac{1}{2} - \frac{3}{4}$  in. on the left side. One  $\frac{1}{4} \times \frac{2}{4}$  in. knockout on the right side for mounting switches and GFCI

Panel Rating: 125 Amp max. 120, 240 VAC or 120, 208 VAC single phase, 60 Hz Timer Switch Rating: 30 Amp Resistive/Inductive, Tungsten or 1000 VA Pilot Duty each pole, 120, 208, 240 VAC; 2 HP (24 FLA), 120 VAC; 5 HP (28 FLA), 240 VAC

**Shipping Weight:** See table **Agency Approval:** CSA/C-US

Model #	Description/ Mechanism	Switch	Clock Supply Volts AC, 60 Hz	Shipping Weight
T40000R	Enclosure Only	None	NA	16.0 lbs (7.2 kg)
T40004R	One T104M	DPST	NA/240	20.5 lbs (9.2 kg)
T40404R	Two T104M	DPST	240/240	21.2 lbs (9.5 kg)

For additional trippers (1 ON 1 OFF per pack), order No. 156T1978A. For additional OFF trippers (25 OFF per pack), order No. PA115. For additional stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.

# T40000R4 Series 100 Amp Specialty Control Panels

These specialty Control Panels are the same as the T40000R Series, except they have been designed for specialty applications. Models include a factory installed GFCI, or stainless steel panel for high corrosive environments or an inside wiring compartment for two devices. These enclosures accept any combination of T100M, P1353ME, P4243ME, PF1000M Series mechanisms.

# **Specifications:**

**Enclosure, Knockouts, Timer Switch Rating & Agency Approval:** Same as above **Panel Rating:** 115 Amp, 120, 240 VAC or 120, 208 VAC single phase, 60 Hz **Shipping Weight:** See table

Model #	Description/ Mechanism	Switch	Clock Supply Volts AC, 60 Hz	Shipping Weight	
T40000R4*	Inside Compartment	None/None	NA/NA	19.4 lbs (8.7 kg)	١

<sup>\*</sup> Enclosure only with inside wiring compartment for twist-lock receptacle and GFCI. For additional trippers (1 ON 1 OFF per pack), order No. 156T1978A. For additional OFF trippers (25 OFF per pack), order No. PA115. For additional stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.













# RC600 & RC900 Series Radio Remote Controls



# RC600 & RC900 Series **Outdoor Radio Remote Controls**

These Modular Radio Receivers are one half of a two part remote control system. They operate as ordinary ON/OFF switches but they also respond to the signals of a hand held transmitter — the other half of the system. The modules are designed for indoor or outdoor use, and can handle a variety of switching applications. By the push of a button on the face of the transmitter, the user is able to turn ON/OFF the connected load (lights, pump, etc.) from any remote location, inside or outside of the house, safely and conveniently. In addition, a single transmitter can operate up to three receivers and is able to "teach" each module a different code (Transmitter model RC939 sold separately).

## **Applications:**

- Pool/Spa Pumps, Lights & Heaters
- Pool/Spa Combinations
- Outdoor Lighting
- Air Blowers
- Signs
- Fountain Pumps
- Water Features
- Motorized Gates
- Motorized Valves

# **Specifications:**

Enclosure: Beige outdoor grade plastic

**Electrical Rating:** See table

Maximum Range: 100 ft. See transmitter model RC939 for details

Agency Approval: CSA/C-US

Model #	Description	Electrical Rating	Size	Shipping Weight
RC613	Receiver with	15 Amp Resistive,	4½ in. H (11.4 cm)	0.5 lbs
	ON/OFF button	10 Amp (1200 W)	3 in. W (7.6 cm),	(0.2 kg)
		Tungsten, 1 HP,	11/4 in. D (4.0 cm)	
	l	motor load, 120 VAC		
RC613L	RC613 with	Same as RC613	Same as RC613	0.7 lbs
	(3) 36 in. long leads	3		(0.3 kg)
RC613R	Heavy duty	20 Amp Resistive,	7 <sup>3</sup> / <sub>4</sub> in. H (19.7 cm)	1.4 lbs
	receiver module	120, 240 V, 12.5	4 in. W (10.7 cm)	(0.6 kg)
		Amp (1500 W);	31/2 in. D (8.9 cm)	
		1.5 HP, 120 VAC;		
		3 HP, 240 VAC;		
		DPST Contacts		
RC615	Timer Interface	Same as RC613	Same as RC613	0.5 lbs
	Module without manual button			(0.2 kg)

# Hand Held Radio Transmitter

This hand held radio transmitter operates the shared equipment of a pool/spa combination by the touch of a button. Additional buttons are available on the transmitter to turn ON/OFF a booster pump, blower and lights.

### Applications:

- Pool/Spa Pumps, Lights & Heaters Air Blowers
- Pool/Spa Combinations
- Sians
- Fountain Pumps Water Features

- Outdoor Lighting
- Motorized Gates
- Motorized Valves

# **Specifications:**

Enclosure: Beige plastic, 43% in. (11.1 cm) H x 23/4 in. (7.0 cm) W x 1 in. (2.5 cm) D

Agency Approval: CSA/C-US

Model # Description Range\* Battery 3 Channel Radio Transmitter 100 ft.. 9 V Transistor type 0.5 lbs (0.2 kg)

The range is 100 feet but depends on many factors including age of battery, proximity of large metal objects, location of the receiver and environmental conditions at the time of transmission.

# RC Series Air Operated Controls

# RC Series Single Circuit Air Switches & Accessories

These Air Switches are designed to control one piece of equipment with one air button. The switch can safely control loads without electricity at the pool, spa or tub side, for example a pump, blower or light. Each time pressure is applied to the remote air button the connected equipment will operate as described in the table. Model with suffix "T" has a built-in 10-minute automatic shut down timer. However, the operation can be stopped any time during the cycle by simply pressing the air button.

# **Applications:**

Pumps

• Air Blowers

Heaters

Lights

## **Specifications:**

**Enclosure:** Plastic for Indoor/Outdoor installations  $4\frac{1}{8}$  in. (10.5 cm) H x  $4\frac{1}{8}$  in. (10.5 cm) W x  $3\frac{3}{8}$  in. (8.6 cm) D

**Electrical Rating:** 20 Amp, Resistive 120, 240 VAC, 1 HP, 120 VAC; 2 HP, 240 VAC **Voltage:** All models (except as noted) operate either on 120 VAC., (Line and Neutral) or 240 VAC., (Line 1, and Line 2 and Neutral). On 50 Hz operation, models with suffix "T" will time out in 11 minutes

Maximum Range: See table and note Shipping Weight: See table

Agency Approval: CSA/C-US



Note: The actual distance between the control and air button depends on the amount of displaced air, the inside diameter of the air hose and other factors beyond the control of the manufacturer.

Model	Description	Switch D	Distance	Shipping Weight
RC21039	ON/OFF	SPST	100 ft.	2.0 lbs (0.09 kg)
Model	Description	Distance/Lengt	th Case Qty	Case Weight
RC4G	Air button for gunite spas	100 ft.	10	1.0 lbs (0.5 kg)
RC6F	Air button – universal	150 ft.	10	1.0 lbs (0.5 kg)
RC117	Air tubing	75 ft.	10	12.0 lbs (5.4 kg)
RC150	Air tubing	500 ft.	10	15.0 lbs (6.7 kg)
RC122B	Air tubing and RC4G	25 ft.	10	4.5 lbs (2.0 kg)
RC127B	Air tubing and RC4G	75 ft.	10	13.0 lbs (5.9 kg)
RC510	(10) Air tubing coupler	N/A	1	0.1 lbs (0.05 kg)





# **RC2000 Series Air Operated Controls**



# **RC2000 Series** Multi-Function Air Switch Mechanisms

These Air Switches provide remote control for one, two or three separate loads. A push button connected to the mechanism with a flexible air hose enables the user to operate a pump, a blower and a light up to 75 feet away. Models with a "T" suffix have a 24-hour digital, multiple program timer that turns a single or two-speed pump ON/OFF several times per day. The air buttons and air hose are not included and must be purchased separately.

# **Applications:**

• Filter Pumps • Jet Pumps • Lights Booster Pumps Blowers Heaters

## **Specifications:**

Enclosure: For Indoor/Outdoor installations, beige plastic, 93/8 in. (23.8 cm) H x 51/2 in. (14.0 cm) W x 33/4 in. (9.5 cm) D

**Knockouts:** Four combination  $\frac{1}{2} - \frac{3}{4}$  in., one on each side of enclosure and two on

Electrical Rating: 20 Amp Resistive, 120, 240 VAC; 1 HP, 120 VAC; 2 HP, 240 VAC;

Voltage: All models operate on 120 VAC (Line and Neutral) or 240 VAC (Line 1, Line 2 and Neutral)

**Shipping Weight:** 

RC2123PT - 3.0 lbs (1.4 kg) RC2343PT - 3.25 lbs (1.5 kg) Agency Approval: CSA/C-US

Model #	Description	Switch	Volts AC, 60Hz
RC2123PT	ON/OFF or HIGH LOW, w/timer	SPDT	120/240
RC2343PT	Two circuit sequential w/timer	4-function	120/240



# RC2100 Series Air Operated Controls

# **RC2100 Series**

# Air or Remote Operated Pool/Spa Controls

This line of Air or Remote Operated Controls is specially designed to control pool/spa combinations economically and reliably away from the equipment. With one touch, these units automatically override the 24 HR. timer and turn ON the filter pump, switch the valves from pool-filter mode to the spa/water feature mode and switch the compatible dual thermostat on the heater/heat pump from the pre-set pool temperature to the pre-set spa temperature. Comes complete with two PE24VA 24-Volt valve actuators.

# **Applications:**

• Pool/Spa Combinations

• Pool/Water Feature Combinations

# **Specifications:** RC2163BE, RC2163BFE

**Enclosure:** 0.048 in. steel with electrostatically applied beige finish  $16\frac{1}{2}$  in. (41.9 cm) H x  $10\frac{1}{8}$  in. (27.6 cm) W x  $4\frac{1}{4}$  in. (10.8 cm) D

**Knockouts:** Two  $\frac{1}{2}$  in., three combination  $\frac{1}{2} - \frac{3}{4}$  in., and two combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. Four  $\frac{1}{2}$  in., three combination  $\frac{1}{2} - \frac{3}{4}$  in. on the back. One combination  $\frac{3}{4} - 1$  in. on the left side. One  $\frac{1}{4} \times \frac{2}{4}$  in. knockout on the right side for mounting switches and GFCI

**Panel Rating:** 100 Amp, 120, 240 VAC. or 120, 208 VAC single phase, 60 Hz **Electrical Rating:** See table below. Actuator Circuit: 24 V, 40 Amp Max

**Shipping Weight:** See table below **Agency Approval:** CSA/C-US

Specifications/Features Voltage		RC2163BE	<b>RC2163BFE</b> 120/240
		120/240	
Remote Con	nmand	1-Air	Any Switch*
Filter Pump	Timer Controlled in Pool Mode	Y	Υ
	Single Speed Only	Υ	Υ
	1.5 HP – 120V; 3HP – 240V.		
	Single or Two Speed	NA	NA
	1 HP – 120V; 2 HP – 240V.		
<b>Heater Cont</b>	rol	Y	Υ
Number of \	/alve Actuator Connections	3	3
Blower	1 HP – 120V; 2 HP – 240V.	NO	NO
Number of E	Breaker Spaces	8/16	8/16
Shipping We	ight (lbs)	24.3 (10.9 kg)	24.3 (10.9 kg)

<sup>\*</sup> Can use spring wound timer, toggle switch or wireless receiver (RC613) with transmitter (RC939) to operate equipment.







## PF1100 Series Freeze Protection Controls



**PF1102M** 





**PF1103MT** 





### **PF1100 Series**

### Single Circuit Freeze Protection Controls

These Freeze Protection Controls are designed to protect pool and spa equipment and plumbing against freeze damage. They turn the pump and heater ON when the outdoor temperature drops below the temperature set by the user-adjustable thermostat.

Models without timer connect to a timing or switching device and they control operation of the equipment, as well as protect it against freeze damage. Models with timer provide both automation and protection for the equipment.

#### **Applications:**

• Filter Pump/Booster Pump Combinations

• Waterfalls • Water Features

#### Specifications:

**Enclosure:** 0.034 in. drawn steel, electrostatically coated, beige color Hasp, with hole for lock, holds permanently attached side-hinged door closed

 $93/_{8}$  in. (23.8 cm) H x  $51/_{4}$  in. (14.0 cm) W x  $35/_{8}$  in. (9.2 cm) D

**Knockouts:**  $\frac{1}{2} - \frac{3}{4}$  in. combination knockouts, one back, one on each side, two

bottom

Thermostat Range: 45°F – 32°F with 5 degrees differential

**Electrical Rating:** See table. **Agency Approval:** CSA/C-US

Model #	Description	Input Rating	HP	Shipping Weight
PF1102	Thermostat only for 240 VAC installation	240 VAC	3	3.7 lbs (1.7 kg)
PF1102M	mechanism only	240 VAC	3	2.0 lbs (0.9 kg)
PF1102T	Timer with thermostat for 240 VAC installation	240 VAC	3	4.5 lbs (2.0 kg)
PF1102MT	mechanism only	240 VAC	3	2.5 lbs (1.1 kg)
PF1103	Thermostat only for 120/240 VAC installation	120/240 VAC*	1.5/3	3.7 lbs (1.7 kg)
PF1103M	mechanism only	120/240 VAC*	1.5/3	2.0 lbs (0.9 kg)
PF1103T	Timer with thermostat for 120/240 VAC installation	120/240 VAC*	1.5/3	4.5 lbs (2.0 kg)
PF1103MT	mechanism only	120/240 VAC*	1.5/3	2.5 lbs (1.1 kg)

<sup>\*</sup> Neutral must be installed.

## **PF1100 & PF1200 Series** Freeze Protection Controls

### PF1100 & PF1200 Series

### Multi-Circuit Freeze Protection Control Centers & **Panels**

These heavy-duty Freeze Protection Controls are designed specifically for pools requiring one or two time switches and protect the pool and spa equipment and plumbing against freeze damage. They turn the pump and heater ON when the outdoor temperature drops below the temperature set by the user-adjustable thermostat. In addition, they have a provision to install switches inside or GFCI receptacle on the side of enclosure.

#### Applications:

• Filter Pumps

• Filter Pump Booster Pump

Fountains

Combinations

• Pool-Spa Combinations

#### **Specifications:** PF1112T, PF1202T

Enclosure: 0.048 in. steel with electrostatically applied light beige finish

12 in. (30.5 cm) H x 12 in. (30.5 cm) W x 41/4 in. (10.8 cm) D

**Knockouts:** Five combination  $\frac{1}{2} - \frac{3}{4}$  in. and two combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. One combination  $\frac{1}{2} - \frac{3}{4}$  in. on the left side and one combination  $\frac{3}{4} - 1$ in. on the back. One knockout 13/4 x 23/4 in. on the right side for mounting switches or

Center Rating: 92 Amp per leg, 168 Amp Max. 120, 240 VAC or 120, 240 VAC single

phase, 60 Hz.

Electrical Rating: See table

Thermostat Range: 44°F - 32°F with 5 degrees differential

Shipping Weight: See table

#### **PF1222TB**

Enclosure: 0.048 in. steel with electrostatically applied beige finish 161/2 in. (41.9 cm) H x 103/8 in. (27.6 cm) W x 41/4 in. (10.8 cm) D,

**Knockouts:** Two  $\frac{1}{2}$  in., three combination  $\frac{1}{2} - \frac{3}{4}$  in., and two combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. Four  $\frac{1}{2}$  in., three combination  $\frac{1}{2} - \frac{3}{4}$  in. on the back. One combination  $\frac{3}{4}$  – 1 in. on the left side. One  $\frac{1}{4}$  x  $\frac{2}{4}$  in. knockout on the right side for mounting switches and GFCI

Panel Rating: 85 Amp max., 120, 240 VAC or 120, 208 VAC single phase, 60 Hz

Electrical Rating: See table

Thermostat Range: 44°F – 32°F with 5 degrees differential

Shipping Weight: See table Agency Approval: CSA/C-US

••
••

For additional trippers (1 ON 1 OFF per pack), Order No. 156T1978A. For additional OFF trippers (25 OFF per pack), Order No. PA115.

For stand-offs for décor knockouts (4 stand-offs per pack), order No. 21T156A.

Note: See page 30 for a detailed list of T100M replacement mechanisms and page 40 for freeze switch mechanisms.

See pages 22-24 for digital freeze protection devices.



PF1112T



**PF1222TB** 





## PX100, PX300 & PX600 Series Safety Transformers



**PX100S** 







## PX100, PX300 & PX600 Series Safety Transformers

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.

#### **Applications:**

• Pool Lights

• Spa Lights

• Garden Lights

• Fountain Lights

Specifications: PX100/S, PX300/S

**Enclosure:** Stainless steel or steel with electrostatically applied light beige finish

Mounting brackets top and bottom

7.25 in. (19.4 cm) H x 5.25 in. (13.3 cm) W x 4.5 in. (11.4 cm) D

Knockouts: Total of ten combination ½ - ¾ in. knockouts, (2) right side, (2) left side,

(2) back, (4) bottom

**Electrical Rating:** See table **Shipping Weight:** See table

PX600/S

**Enclosure:** Stainless steel or steel with electrostatically applied light beige finish.

Mounting brackets top and bottom

10 in. (25.4 cm) H x 10 in. (25.4 cm) W x 5 in. (12.7 cm) D

**Knockouts:** Two combination  $\frac{1}{2} - \frac{3}{4}$  in., and 4 combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. Total of six combination  $\frac{1}{2} - \frac{3}{4}$  in. knockouts, 2 right side, 2 left side, 2 back

**Electrical Rating:** See table **Shipping Weight:** See table

Model #	Description	Input 60 Hz	Output	Shipping Weight
PX100	100 W Beige	120 VAC, 1 Amp	12 or 13 V	7.0 lbs (3.2 kg)
	Steel Enclosure			
PX100S	100 W Stainless	120 VAC, 1 Amp	12 or 13 V	7.0 lbs (3.2 kg)
	Steel Enclosure			
PX300	300 W Beige	120 VAC, 3 Amp	12, 13 or 14 V	13.0 lbs (5.9 kg)
	Steel Enclosure			
PX300S	300 W Stainless	120 VAC, 3 Amp	12, 13 or 14 V	13.0 lbs (5.9 kg)
	Steel Enclosure			
PX600	600 W Beige	120 VAC, 6 Amp	12, 13 or 14 V	26.0 lbs (11.7 kg)
	Steel Enclosure			
PX600S	600 W Stainless	120 VAC, 6 Amp	12, 13 or 14 V	26.0 lbs (11.7 kg)
	Steel Enclosure			

## T10000RT, T40000RT & PE45343RCT Series Mechanical Controls With Safety Transformers

## T10000RT, T40000RT & PE45343RCT Series

#### **Pool Panels with Transformer**

These Panels with Transformer offer an all-in-one, easy to wire and extremely cost effective electrical control center for any pool or spa installation. Inside the enclosure are the time switch, the transformer and other components needed for the completion of this installation. The T40000RT Series panels will accept additional Intermatic mechanisms and/or components.

The PE45343RCT Series includes all the features of the PE Series Digital Controls plus two PE24VA valve actuators, Wireless Panel-Mounted Transceiver (PE953), which allows the system to display the status of each of the five circuits (3 timed and 2 on demand), pool and spa water temperature, pool and spa thermostat set point, heating status and overall communication status. (See pages 20-21)

#### **Applications:**

- Filter Pumps
- Blowers
- Low Voltage Pool/Spa Lighting
- Low Voltage Outdoor Lighting
- Fountains

#### **Specifications:**

T10000RT Series

**Enclosure:** 0.048 in. steel with electrostatically applied light beige finish

12 in. (30.5 cm) H x 12 in. (30.5 cm) W x  $4^{1}\!/\!_{4}$  in. (10.8 cm) D

**Knockouts:** Five combination  $\frac{1}{2} - \frac{3}{4}$  in. and two combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. One combination  $\frac{1}{2} - \frac{3}{4}$  in. on the left side and one combination  $\frac{3}{4} - 1$  in. on the back. One knockout  $\frac{1}{4} \times 2^{\frac{3}{4}}$  in. on the right side for mounting switches or GFCI

**Center Rating:** 62 Amp per leg, 168 Amp Max., 120, 240 VAC or 120, 208 VAC single

phase, 60 Hz

Shipping Weight: See table

**T40000RT Series** 

Enclosure: 0.048 in. steel with electrostatically applied light beige finish

203/4 in. (52.7 cm) H x 123/4 in. (32.4 cm) W x 41/4 in. (10.8 cm) D

**Knockouts:** Seven combination  $\frac{1}{2} - \frac{3}{4}$  in. and three combination  $\frac{3}{4} - 1$  in. knockouts on the bottom. Five combination  $\frac{1}{2} - \frac{3}{4}$  in. on the left side. One  $\frac{13}{4} \times \frac{23}{4}$  in. knockout on the right side for mounting switches and GFCI

**Panel Rating:** T40000RT Series — 100 Amp, 120, 240 VAC or 120, 208 VAC single

phase, 60 Hz

Time Switch Rating: T40000R Series – See page 30

**Transformer Rating:** See table **Shipping Weight:** See table

Model #	Transforme Watts	r Input 60 Hz	Output	Mechanism	Shipping Weight
T10004RT1	100	120 VAC, 1 Amp	12 V, 13 V,	T104M	14.0 lbs (6.3 kg)
T10004RT3	300	120 VAC, 3 Amp	12 V, 13 V, 14 V	T104M	20.0 lbs (9.0 kg)
T40003RT3	300	120 VAC, 3 Amp	12 V, 13 V, 14 V	T103M	32.0 lbs (14.4 kg)
T40004RT1	100	120 VAC, 1 Amp	12 V, 13 V,	T104M	26.0 lbs (11.7 kg)
T40004RT3	300	120 VAC, 3 Amp	12 V, 13 V, 14 V	T104M	32.0 lbs (14.4 kg)

For additional trippers (1 ON 1 OFF per pack), Order No. 156T1978A. For additional OFF trippers (25 OFF per pack), Order No. PA115. For stand-offs for décor knockouts (4 stand-offs per pack), Order No. 21T156A. Note: See Page 30 for a detailed list of T100M replacement mechanisms.

### See page 14 for Digital Controls









## PB800 & PB900 Series Mechanical Replacement Timers



**PB913N** 



PB913N66



PB913N84



PB873MKZ





### **PB800 & PB900 Series**

#### **Mechanical Timer Mechanisms**

These timers provide automatic control for pumps, cleaners and other types of loads. Timers have three-way mounting; flush in round opening, raised in rectangular opening or on base. Quick connect terminals for easy installation.

#### **Applications:**

- Filter Pumps
- Booster Pumps
- Sprinkler Systems Heating Systems

- Lights
- Fountains Cleaning Systems Security Systems

#### Specifications:

Size: 31/3 in. (84.8 cm) H x 213/16 in. (71.4 cm) W x 161/64 in. (49.6 cm) D

Electrical Rating: 20 Amp Resistive, 120-277 Volt; 1250 Watt Tungsten 125 VAC; 1 HP

(16 FLA), 120 VAC; 2 HP (12 FLA), 240 VAC; 360 VA Pilot Duty, 120-240 VAC.

**Timing Cycle:** 24 hour dial – minimum ON time 1 hour, maximum ON time 23 hours, increments of 30 minutes. 7-day dial – minimum ON time 6 hours, maximum ON time 162 hours, in increments of 3 hours

Color: Black housing with white screening and orange trippers

**Shipping Weight:** 8 oz (0.22 kg) All mechanisms are shipped in bulk (36 per carton)

unless otherwise specified **Agency Approval:** UL, CSA

Model #	Switch	Dial	Volts AC, 60 Hz	# of Trippers	Manual Override
PB873MKZ	SPST	7 day	120	56*	No
PB913N	SPST	24 hour	120	48*	No
PB913N66	SPST	24 hour	120	48**	Yes
PB913N84	SPST	24 hour	120	4**	Yes
PB914N	SPST	24 hour	208-277	48*	No
PB914N66	SPST	24 hour	208-277	48*	Yes

The standard mechanisms listed above have four ¼ in. male quick connect terminals (two for the load and two for the independent clock motor).

#### **Cross Reference Table for Discontinued Models**

Old Model #	Replaced By	Notes	Old Model #	Replaced By	Notes
PB813MZ56	PB913N		PB913N50	PB913N	
PB815MZ52	PB913N	1	PB913N68	PB913N66	
PB873MKZ25	PB873MKZ		PB913N70	PB913N	
PB873MKZ26	PB873MKZ		PB913N82	PB913N66	
PB878MKZ25	PB374EB	2	PB913N83	PB913N84	
PB879MKZ25	PB373EB	2	PB913P68	PB913N66	3
PB913M3	PB913N		PB913P69	PB913N66	3
PB913M9	PB913N	3	PB913N86	PB913N66	
PB913M56	PB913N	3	PB914N50	PB914N	
PB913N22	PB913N		PB915M81	PB913N	
PB913N25	PB913N		PB918N26	PB314E	2
PB913N26	PB913N		PB918N50	PB314E	2
PB913N27	PB913N		PB918N83	PB314E	2

Note: Replacement mechanisms may or may not have the same tripper colors and may require different method of connections.

- 1 Original timer has gold plated contacts.
- 2 Replacement is 50/60 Hz electronic timer.
- 3 Original timer lead connections must be changed to 1/4 in. quick connects.

<sup>\*</sup> Permanently attached orange trippers.

<sup>\*\*</sup> For additional trippers (2 ON 2 OFF per pack), order No. 156PB10398A.

## P1100 & P1200 Series Portable Outdoor Timers With GFCI & Photo Control

### P1100 Series

#### **Portable Outdoor Timers & Heavy-Duty Outdoor Timers**

These portable outdoor timers are specially designed to control the filter pump of a portable pool or spa, but they can also be used to turn ON and OFF outdoor decorations, engine block heaters and other appliances, indoors or outdoors.

#### **Applications:**

- Filter Pumps
- Air Conditioners
- Sians

- Lights
- Engine Block Heaters
- Fans

#### Specifications:

Enclosure: Outdoor grade plastic

5 in. (12.7 cm) H x  $5\frac{1}{2}$  in. (13.97 cm) W x  $3\frac{3}{4}$  in. (9.52 cm) D Cord: 3 wire, outdoor grade, 22 in. long, with grounded plug

Timer: 24 hour with 23½ hour maximum ON time. Two ON, two OFF trippers:

standard. Dial will accept up to 12 sets of trippers

Shipping Weight: 1.7 lbs (0.7 kg)

Model #	Description	Electrical	Plug & Receptacle
P1101	Timer	15 Amp (1800 W),	• • • • • • • • • • • • • • • • • • • •
		Resistive or Tungsten;	
		1 HP Air Conditioner,	5-15
		(15 FLA, 90 LRA), Motor Load	
P1121	Timer	15 Amp (1800 W),	
		Resistive or Tungsten;	
		1 HP Air Conditioner,	5-15
		(15 FLA, 90 LRA), Motor Load	
P1131	Heavy-Duty Timer	20 Amp Resistive, 1 HP,	
	w/Twist-Lock	(15 FLA, 90 LRA) Motor Load	5L-20
	Plug & Receptacle		

For additional trippers (2 ON 2 OFF per pack), order No. 156PB10398A.

### P1200 Series

#### Two-Circuit Portable Outdoor Timer

These portable two-circuit above ground pool timers incorporate a plug in for a timed circuit (normally used for a pool pump) and a plug-in for a live circuit (typically used for a pool light). GFCI protected circuits and a three-prong grounded plug for the time switch supply are also built-in.

#### **Applications:**

• Above Ground Pool Pumps

Above Ground Pool Lights

#### **Specifications:**

**Enclosure:** NEMA 3R rated for Indoor/Outdoor installation  $9\frac{3}{8}$  in. (23.8 cm) H x  $5\frac{1}{2}$  in. (14.0 cm) W x  $3\frac{3}{8}$  in. (9.2 cm) D

**Knockouts:** Combination  $\frac{1}{2} - \frac{3}{4}$  in. nominal knockouts, one on the back and each side of enclosure, two pre-cut on bottom

Timer: 24 hour with 231/2 hour maximum ON time. Two ON, two OFF trippers

standard. Dial will accept up to 12 sets of trippers

Shipping Weight: 2.8 lbs. (1.3kg)

Model #	Description	Electrical	Plug & Re	ceptacle
P1251P	PB913N84 Timer	15 Amp (1800 W), Resistive or		
NEW PRODUCT		Tungsten; 1 HP (15 FLA, 90 LRA)	5-15	8
PRODUCT		Motor Load w/photo control		
P1261P	PB913N84 Timer	15 Amp (1800 W), Resistive or		
		Tungsten; 1 HP (15 FLA, 90 LRA)	5-15	8
		Motor Load		

For additional trippers (2 ON 2 OFF per pack), order No. 156PB10398A.





## PB300 Series Electronic Replacement Timers



PB313E PB313EK PB314E PB314EK



PB373E PB374E



## PB300 Series Electronic Timer Mechanisms

These compact Electronic Timers are specially suited for applications where equipment needs to be cycled ON and OFF up to 8 times per day, and where automatic operation of the equipment requires occasional override by someone other than a qualified service professional. They offer rugged construction, resistance to surges and humidity, operate between wide temperature extremes and come with a 5 year service life replaceable lithium battery. A light indicator illuminates when the timer is in the ON position. Select feature allows timers to be continuously ON, OFF or in AUTO mode.

PB300EK Series Electronic Timer kits are designed for applications where PB Series Mechanical Timers need to be replaced. The connected load must not exceed the ratings of these timers. The kits contain all the necessary hardware for a speedy repair or exchange.

#### **Applications:**

- Filter Pumps
- Booster Pumps
- Sprinkler Systems Heating Systems

- Lights
- Fountains
- Cleaning Systems Security Systems

Volta AC

#### **Specifications:**

Enclosure: Beige electrical grade plastic

Size: PB300 Series: 23/8 in. (6.0 cm) High and Wide

EB suffix:  $1\frac{1}{18}$  in. (28 cm) Deep E suffix:  $\frac{7}{8}$  in. (2.2 cm) Deep

#### **Electrical Rating:**

A = 16 Amp Resistive, 0.5 HP motor load 24, 120 or 240 VAC, 50/60 Hz

B = 20 Amp Resistive, 10 Amp (1200 Watt) Tungsten, 1 HP (16 FLA), motor load;

720 VA Pilot Duty, 120 VAC, 50/60 Hz

C = 20 Amp Resistive, 2 HP (12 FLA), 240 VAC, 50/60 Hz

Shipping Weight: 0.3 lbs. (0.14 kg)

Agency Approval: UL

Model #	Description	Switch	Rating	50/60 Hz	
PB313E	24 hour	SPDT	Α	120	••
PB313EK	PB Series replacement kit	SPDT	Α	120	
PB314E	24 hour	SPDT	Α	240	
PB314EK	PB Series replacement kit	SPDT	Α	240	
PB373E	7 day	SPST	В	120*	
PB374E	7 day	SPST	С	240*	

Output voltage is the same as supply voltage.

## P1000 & P7000 Series Electronic Time Switches

### P1000 & P7000 Series

#### **Electronic Time Switches and Mechanisms**

This line of electronic time switches in safety enclosures is specially suited for applications where there is a need to turn equipment up to 8 ON and OFF cycles daily, and where the automatic operation of the equipment requires occasional override by someone other than a qualified service professional. Electronic technology allows up-to-the-minute programming accuracy. The unique "door within the door" provides safe access to the timer control buttons, but prevents entry into the wiring compartment. Light indicator illuminates when timer is in ON position. An override feature is provided to allow pool service without interruption of ON/OFF settings. "Select feature" allows timer to be continuously ON, OFF or in Auto mode. Typical application for the clock circuit would be the pool pump, and a pool light for the radio circuit. In case of power failure, a replaceable lithium battery preserves programming for up to three years.

#### **Applications:**

• Filter Pumps • Pool/Spa Lights • Water Features

eatures • Fountains

#### **Specifications:**

#### **Mechanism Specifications:**

**Size:** Standard mechanism fits in all standard Intermatic time switch enclosures and swimming pool control panels

#### Rating:

P7103ME - 1.5 HP, 120 VAC; 3.0 HP, 240 VAC

Shipping Weight: 1.41 lbs (0.6 kg)

 $\textbf{Enclosure Specifications:} \ \textbf{All plastic NEMA 3R rated for Indoor/Outdoor installation}.$ 

93/ $_8$  in. (23.9 cm) H x 51/ $_2$  in. (14.0 cm) W x 35/ $_8$  in. (9.2 cm) D in beige finish

**Knockouts:** Combination  $\frac{1}{2} - \frac{3}{4}$  in. nominal knockouts, 1 on back and each side of

enclosure, and 2 on bottom **Shipping Weight:** 3.75 lbs (1.7 kg) **Agency Approval:** CSA/C-US

Model #	Description	Switch	Supply Voltage 50/60 Hz
P1103FE	24-Hour Electronic	One DPST	120 V for clock
	Time Switch Enclosure		120 V. 240 V for load

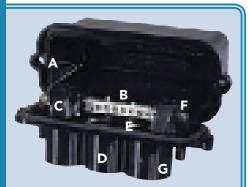
Note: See page 31 for available metal and plastic enclosures.







## PJB Series Pool/Spa Junction Boxes & Water Valve Motorized Actuator



#### PJB2175



PJB4175





### **PJB Series**

### Pool/Spa Junction Box & Mounting Bracket

These polymeric, water tight, multi-fixture Junction Boxes are specially designed for pools, pool-spa combinations and landscape applications. The PJB4175 provides safe and reliable connection for up to four lights, while the PJB2175 supports up to two lights. They will accommodate flexible cords from #16-3 up to #12-3 and #10-3 in any combination and non-metallic conduits from ½ to 1 in., including one for supply conductor feed. An optional wall/post mounting bracket is also available.

#### **Applications:**

Pool Lights

• Spa Lights

• Landscape Lights

#### **Specifications:**

Enclosure: Outdoor grade plastic. PJB4175 – 7.5 in. L x 4.75 in. W x 5.0 in. D

PJB2175 - 7.0 in. L x 3.0 in. W x 4.0 in. D

Note: Bracket sold separately.

#### Photo call outs:

- A. Only two screws required to attach lid to base
- B. Easy access ground bar
- C. Innovative strain relief design
- D. Accepts multiple conduit sizes
- E. Platform design offers ease of installation
- F. One external bonding lug
- G. Supports up to two pool/spa lights
- H. Sloped platform design provides ultimate convenience
- I. Supports up to four pool/spa lights

Model #	Description	Light Connection	Case Qty.	Shipping Weight
PJB2175	Pool/Spa Light Junction Box	2	24	19.2 lbs (8.6 kg)
PJB4175	Pool/Spa Light Junction Box	4	12	13.2 lbs (6.0 kg)
PA114	Wall/Post Mounting Bracket	_	10	5 lbs (2.3 kg)

### 24-Volt Valve Actuator

Designed with quality in mind, Intermatic's 24-Volt valve actuators provide reliable control of 2-way and 3-way diverter valves for pool/spa combinations and water features. The water flow can be altered for specific applications through the adjustable cam, which rotates diverter valves to multiple degree settings. The cam settings can be easily adjusted by simply removing the lid.

These valve actuators are compatible with all pool/spa valves currently offered in the industry and will retrofit into all pool/spa control systems.

#### **Applications:**

PoolsSpas

ullet Fountains

Water Features

#### **Standard Features:**

- Automates compatible diverter valves for pool/spa & pool/water feature combinations
- Adjustable cam rotates diverter valves to multiple degree settings
- Retrofits into all pool/spa control systems on the market

#### **Specifications:**

Shipping Weight: See table

Case Quantity: 6

Model #	Description	Voltage	Shipping Weight Each
PE24VA	Valve Actuator	24 VAC	3.5 lbs (2.2 kg)

## **Pool/Spa Accessories**

## **Emergency Shut Off Switch**

The revised Article 680-12 of the National Electrical Code (NEC) now requires the installation of a disconnect switch "...located within sight from all pools, spas..." This Safety Switch is intended for disconnecting electrical equipment from its power source, quickly and safely, in case of emergency. Any person, even if not familiar with the installation or safety procedures, can shut down the connected equipment by simply moving the large red lever to the OFF position. It fits in a single-gang junction box and is rated for outdoor installations.

#### **Specifications:**

Electrical Rating: 1 HP, 120V; 3 HP, 240V; 20 Amp Resistive, 120, 240V DPST

Shipping Weight: 0.5 lbs (0.2 kg)
Housing: Electrical grade plastic.
Face Plate: Beige powder coated steel
Agency Approval: CSA/C-US

## Fireman Switch

This switch provides coordinated control for any pool/spa heater and any filter pump. It is designed to turn OFF a gas fired pool/spa heater approximately 20 minutes before the filter pump shuts down. This eliminates the problem of pounding and knocking due to overheated water, reduces scale and lime deposits and extends the service life of the heater.

### Nonmetallic Hub Kits 156PA13713A (½ in.), 156PA13714A (¾ in.), 156PA13715A (1 in.)

All Intermatic Control Centers and Control Panels are approved for direct underwater light connection, eliminating the need for additional junction boxes. These Nonmetallic Hub Kits provide direct connection to 12 Volt and 120 Volt underwater luminaries.

### Metallic Hub Kit 156PA14336A (½ in.)

The Metallic Hub Kit is used for the same type of applications as the Nonmetallic Hub Kits, but is designed for applications that require red brass conduit.

### Stand-Off Posts 21T166A (2), 21T156A (4)

Stand-Off Posts are used for mounting toggle switches inside any Intermatic Pool/ Spa Control Center and Control Panel. The switches are normally used for on-demand control pool/spa lighting, landscape lighting, water features, etc. The dead front is detached, the switch knockout is removed from the dead front and the stand-off post is secured to the back panel of the enclosure. The switch is then mounted to the posts with standard mounting screws and the dead front is re-attached.

## Back-Feed Retainer Kit 22T904A

A recent revision to the breaker base in all Intermatic Pool/Spa Control Panels now allows installers to back-feed the branch circuits using one breaker, single or double pole, as a main disconnect. In accordance with NEC Article 408.36 (F) –2005, the installation requires an additional fastener/retainer kit.





## **Pool/Spa Accessories**

Model #	Description	Where Used
124T1948	Insulator for T101 & T102 Series – Clear	All T101 & T102 Series Time Switches and Mechanisms
124T1952	Insulator for T103 & T104 Series – Clear	All T103 & T104 Series Time Switches and Mechanisms
124T2411A	(10) Insulators for T100 Series – Black, Rigid	All T100 Series Time Switches and Mechanisms
143T135	DPST Relay with 240 V Coil	All PF1102 Series Controls and Mechanisms, PF1200 Series
		Controls, P7102ME Electronic Mechanism
143T136	DPST Relay with 120 V Coil	All PF1103 Series Controls and Mechanisms, RC2200E Series
		Air Controls, RC2403RT Air Control, RC613R Receiver, P7103ME
		Electronic Mechanism
143RC151	DPST Relay with 24 VDC Coil	RC2100FE and RC2100E Series Air Controls
156PB10398A	2 ON and 2 OFF Trippers	All P1100 Series Timers, P1261P Portable Outdoor Timer,
		PB913N84 Series Mechanism
156T1978A	1 ON and 1 OFF Tripper	All T100 Series Time Switches and Mechanisms
156T6738A	(10) Insulators for Time Switch Manual Lever	All T100 Series Time Switches and Mechanisms
22T338GR	Snap-In Time Switch Mounting Bracket	All Pool/Spa Enclosures and T100 Series Time Switches
PA115	(25) OFF Trippers and Screws only	All T100 Series Time Switches and Mechanisms
WG1570-10D	120 Volt Clock Motor	T100 Series Time Switches and Mechanisms
WG1573-10D	208-277 Volt Clock Motor	T100 Series Time Switches and Mechanisms









124T1952

124T2411A

143T135

143T136



143RC151



156PB10398A



156T1978A



156T6738A



22T338GR



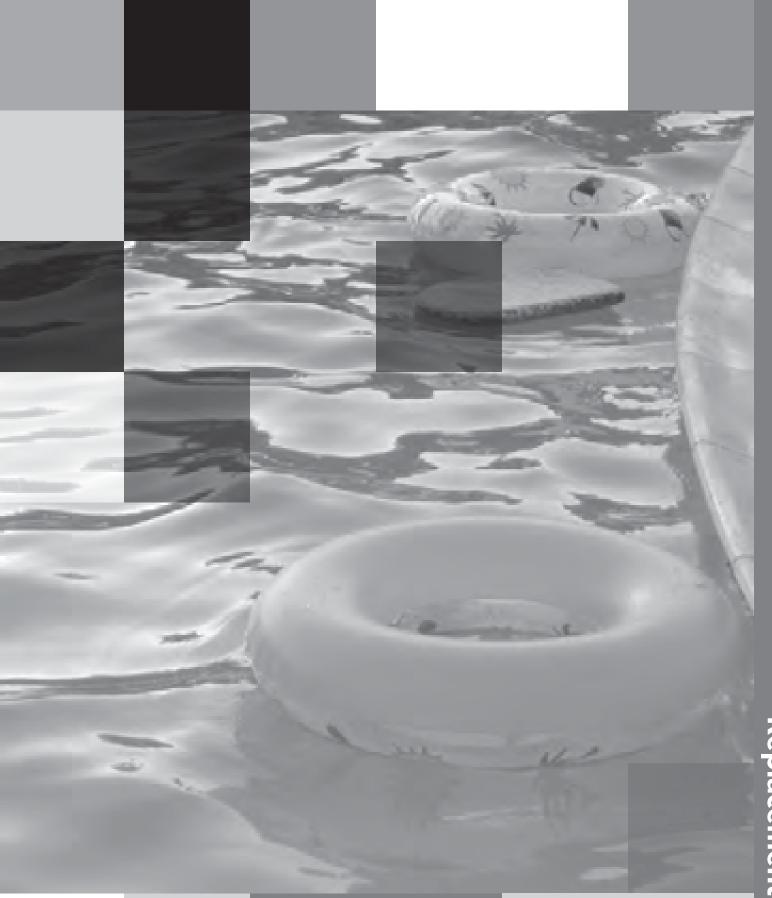
PA115



WG1570-10D



WG1573-10D







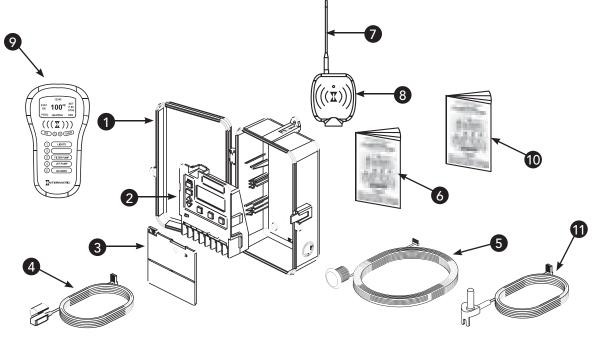
Model Number Page	Model Number Page	Model Number Page
PE153 53	PF1103 59	T104R201 72
PE153F 53	PF1103T 59	T10000R 73
PE153P 53	PF1112T60	T10004R 7 3
PE153PF 53	PF1202T 61	T10004RT1 7 4
PE153PW 5 3	PF1222TB62	T10004RT3 74
PE153PWF 53	PJB2175 6 3	T10101R 7 3
PE153RC5 3	PJB4175 63	T10404R 73
PE1501RC 5 5	PX10064	T10604R 73
PE1541RC55	PX100S 65	T12404R 73
PE10000 54	PX3006 4	T21000R 7 5
PE15300 54	PX300S6 5	T21001R 75
PE15300F 5 4	PX600 66	T21004R 75
PE200005 6	PX600S 67	T30000R5 76
PE25300 5 6	RC2123PT 71	T30004R 76
PE25300F 56	RC2163BE 68	T30401R 76
PE25300RC56	RC2163BE (Housing Assembly) 69	T30404R 7 6
PE30000 57	RC2163BFE 68	T30604R 76
PE35300 5 7	RC2163BFE (Housing Assembly) 70	T32404R 76
PE35300RC 57	RC2343PT71	T40000R 7 7
PE35343RC 57	T101P3 72	T40000R4 78
PE40000 5 8	T101P201 72	T40004R 7 7
PE45300 58	T101R3 72	T40004RT1 79
PE45343RC 58	T101R201 72	T40004RT3 79
PE45343RC3 5 8	T104P3 72	T40404R 77
PF1102 59	T104P201 72	
PF1102T 59	T104R3 72	



REPLACEMENT PARTS - POOL/SPA CONTROLS

### **PE153 Series Electronic Controls**

Model No.	Item No. 1	Item No. 4	Item No. 5	Item No. 7	Item No. 8	Item No. 9	Item No. 10	Item No. 11
PE153	2T2485GA	No	No	No	No	No	No	No
PE153F	2T2485GA	Yes	No	No	No	No	No	No
PE153P	2T2502GA	No	No	No	No	No	No	No
PE153PF	2T2502GA	Yes	No	No	No	No	No	No
PE153PW	2T2502GA	No	Yes	No	No	No	No	No
PE153PWF	2T2502GA	Yes	Yes	No	No	No	No	No
PE153RC	2T00027A	No	No	Yes	Yes	Yes	Yes	Yes



Item No.	Description	escription Part No.		*List Price (\$)	
1	Enclosure	See table above.	3.0	83.69	
2	3-Circuit Timer Mechanism	P1353ME	5.0	317.59	
3	Insulator - Terminals	124PE2587	0.5	12.39	
4	Thermostat - Freeze Protection	173PA28A	1.5	79.58	
5	Wired Remote	133PE1484A	5.0	257.69	
6	Instruction Booklet - P1353ME	158PE12523	0.3	5.50	
7	Antenna for PE950	PA118	0.5	30.64	
8	Receiver (Antenna included)	PE650	1.5	259.41	
9	Hand Held Transmitter	PE950	1.5	284.11	
10	Instruction Booklet - PE650/950	158700	0.3	5.50	
11	Water Probe	PA122	1.2	63.33	

<sup>\*</sup> Prices are subject to change without notice

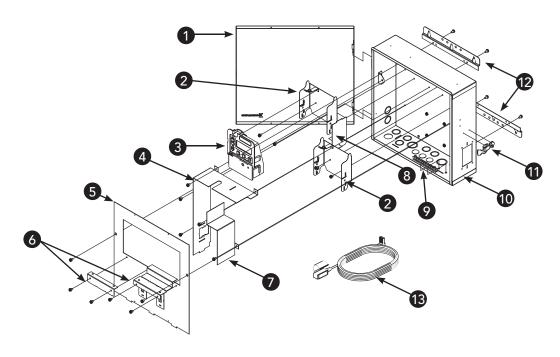


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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## **PE15300 Series Electronic Control Centers**

Model No.	Item No. 3	Item No. 13
PE10000	None	None
PE15300	P1353ME	None
PE15300F	P1353ME	178PA28A



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover	6PE2817A-WWH	3.5	51.92
2	Bracket - Timer	22T338GR	0.8	9.62
3	3 Circuit Timer Mechanism	P1353ME	1.5	317.59
4	Plate - Barrier	24PE6280-WWH	1.5	30.14
5	Plate - Dead Front	24PE6037-WWH	3.5	39.45
6	Plate - Filler	24PE6035-WWH	0.8	15.20
7	Plate - Divider	22PE6279-WWH	0.8	25.06
8	Plate - Barrier, Vertical	24PE6056-WWH	0.5	22.68
9	Terminal Bar - Grounding	PA116	0.5	17.41
10	Case - Enclosure	2PE34674-WWH	4.0	69.01
11	Latch - Enclosure	PA117	0.3	13.99
12	Bracket - Enclosure Each	22T713	1.0	13.55
13	Thermostat - Freeze Protection	See Table Above	1.5	79.58
14	Instruction Booklet P1353ME	158PE12523	0.3	5.50

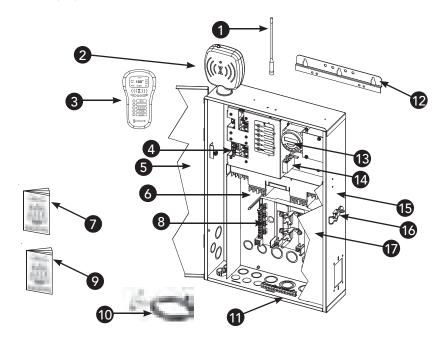
<sup>\*</sup> Prices are subject to change without notice





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

PE1501RC Wireless Pool-to-Spa/Water Feature Control PE1541RC Wireless Pool-to-Spa/Water Feature Control with (2) PE24VA Valve Actuators



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$) 30.64	
1	Antenna for PE650	PA118	0.5		
2	Receiver (Antenna included)	PE650	1.5	259.41	
3	Hand Held Transmitter	PE950	1.5	284.11	
4	PC Board assembly	188PE1734A	1.0	119.44	
5	Cover - Enclosure	6PE2816A-WWH	5.0	55.15	
6	Relay	143PS307	0.5	47.30	
7	Instruction Booklet PE650/950	15800700	0.3	5.50	
8	Buss Bar Assembly	124T2530A	1.5	37.90	
9	Instruction Manual PE1541RC	158PE12842	0.5	12.00	
10	Water Probe	PA122	1.2	63.33	
11	Terminal Bar - Grounding	PA116	0.5	17.41	
12	Bracket - Enclosure, each	22T713	1.0	13.55	
13	Timer	PB313EK	1.0	55.66	
14	Transformer	119PE661A	1.5	53.04	
15	Case - Enclosure 2PE3450A-WWH		7.5	75.05	
16	Latch - Case PA117		0.3	13.99	
17	Plate - Deadfront	24PE6194-WWH	5.0	47.96	

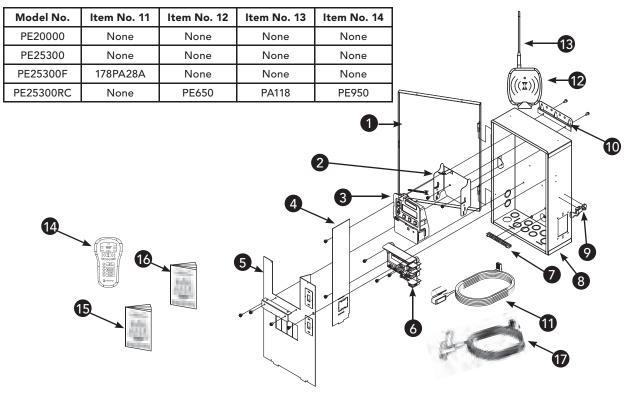
<sup>\*</sup> Prices are subject to change without notice



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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **PE20000 Series Electronic Control Centers**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6RC2344A	3.0	46.84
2	Bracket - Timer	22T338GR	0.8	9.62
3	3 Circuit Timer Mechanism	P1353ME	1.5	317.59
4	Plate - Barrier	24PE6034-WWH	1.5	35.49
5	Plate - Dead Front	24PE6103-WWH	2.0	33.51
6	Breaker Base	124TP2608A	1.5	34.70
7	Terminal Bar - Grounding	PA116	0.5	17.41
8	Case - Enclosure	2PE3386A-WWH	4.0	75.15
9	Latch - Case	PA117	0.3	13.99
10	Bracket - Enclosure	22T722	0.8	13.55
11	Thermostat - Freeze Protection	See Table Above	1.5	79.58
12	Receiver (Antenna Included)	PE650	1.5	259.41
13	Antenna for PE950	PA118	0.5	30.64
14	Hand Held Transmitter	PE950	1.5	284.11
15	Instruction Booklet P1353ME	158PE12523	0.3	5.50
16	Instruction Booklet PE650/950	15800700	0.3	5.50
17	Water Probe	PA122	1.2	63.33

<sup>\*</sup> Prices are subject to change without notice

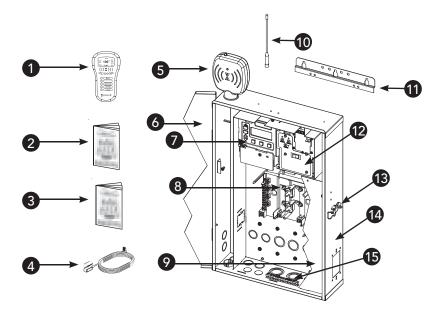




REPLACEMENT PARTS - POOL/SPA CONTROLS

## PE30000 Electronic Pool, Spa, and Pool-to-Spa Controls

Model No.	Item No. 1	Item No. 3	Item No. 4	Item No. 5	Item No. 7	Item No. 10	Item No. 12
PE30000	No	No	No	No	No	No	No
PE35300	No	No	No	No	Yes	No	No
PE35300RC	Yes	Yes	Yes	Yes	Yes	Yes	No
PE35343RC	Yes	Yes	Yes	Yes	Yes	Yes	Yes



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Hand Held Transmitter	PE950	1.5	284.11
2	Instruction Booklet P1353ME	158PE12523	0.3.	5.50
3	Instruction Booklet PE650/950	15800700	0.3	5.50
4	Water Probe	PA122	1.2	63.33
5	Receiver (Antenia included)	PE650	1.5	259.41
6	Cover - Enclosure	6PE2816A-WWH	4.5	55.42
7	3-Circuit Timer Mechanism	P1353ME	1.5	317.59
8	Breaker Base	124T2530A	1.5	37.90
9	Plate - Dead Front	24PE6031-WWH	2.5	38.60
10	Antenna for PE650	PA118	0.5	30.64
11	Bracket - Enclosure, each	22T713	1.5	13.55
12	Valve Actuator Control Mech.	P4243ME	2.5	348.35
13	Latch - Case	Pa117	0.3	13.99
14	Case - Enclosure	2PE3475A-WWH	6.5	81.34
15	Terminal Bar - Grounding	PA116	0.5	17.41

<sup>\*</sup> Prices are subject to change without notice

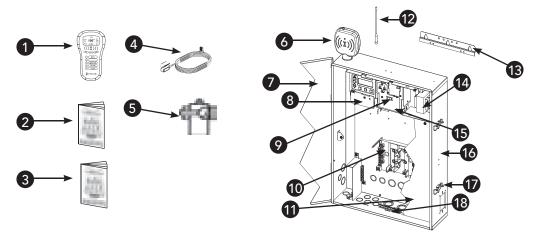


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### **REPLACEMENT PARTS - POOL/SPA CONTROLS**

## PE4000 Series Electronic Pool/Spa Control Systems

Model No.	Item No. 1	Item No. 3	Item No. 4	Item No. 5	Item No. 6	Item No. 8	Item No. 9	Item No. 12	Item No. 14
PE400000	No	No							
PE45300	No	No	No	No	No	Yes	No	No	No
PE45343RC	Yes	No							
PE454343RC3	Yes	Yes							



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Hand Held Transmitter	PE950	1.5	284.11
2	Instruction Booklet PE1353ME	158PE12523	0.3	5.50
3	Instruction Booklet PE650/950	15800700	0.3	5.50
4	Water Probe	PA122	1.2	63.33
5	Valve Actuator	PE24VA	3.5	111.17
6	Receiver (Antenna Included)	PE650	1.5	259.41
7	Cover - Enclosure	6PE2923A-WWH	5.5	66.41
8	3-Circuit Timer Mechanism	P1353ME	1.5	317.59
9	Valve Actuator Control Mech.	PE4243ME	2.5	348.35
10	Breaker Base	124T2530A	1.5	37.90
11	Plate - Dead Front	24PE6146-WWH	3.5	44.66
12	Antenna for PE650	PA118	0.5	30.64
13	Bracket - Enclosure, each	22T713	1.5	13.55
14	Transformer Assembly	PA124	8.8.	131.72
15	Bracket Time Switch	22T338A	0.8	9.62
16	Case - Enclosure	2PE3432A-WWH	7.5	96.44
17	Latch - Case	PA117	0.3	13.99
18	Ground Bar	PA116	0.5	17.41

<sup>\*</sup> Prices are subject to change without notice

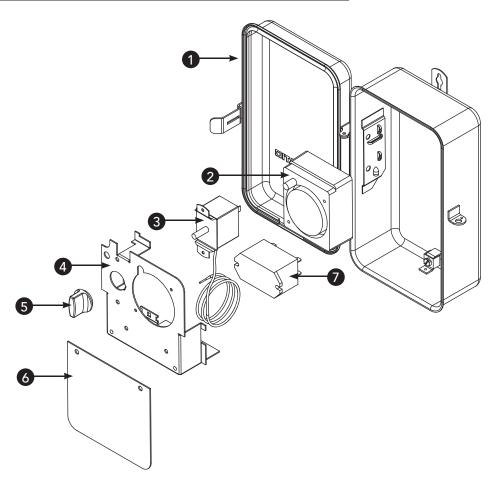




**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **PF1000 Series Freeze Protection Controls**

Model No.	Item No. 2	Item No. 4	Item No. 7
PF1102	None	2400021	143T135
PF1102T	PB913M8K	2400094-WWH	143T135
PF1103	None	2400021	143T136
PF1103T	PB914M8K	2400094-WWH	143T136



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Enclosure	2T2485GA	3.0	83.69
2	Timer	See Table Above	0.5	30.09
3	Thermostat	178T24	1.0	50.16
4	Plate - Mech. Mounting	See Table Above	1.0	35.29
5	Knob - Thermostat	Part of item 3	-	
6	Plate Cover - Wiring Compartment	2400057	1.0	14.82
7	Relay	See Table Above	0.5	45.98

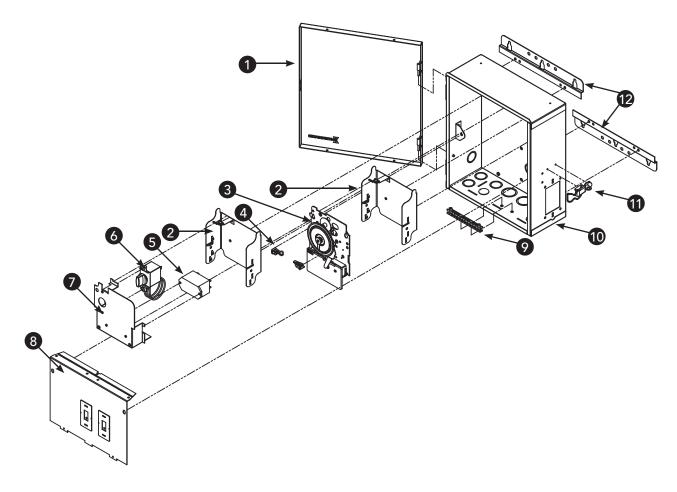
<sup>\*</sup> Prices are subject to change without notice



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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **PF1112T Freeze Protection Control**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6TP2819A-WWH	3.0	45.12
2	Bracket - Time Switch	22T338GR	0.8	9.62
3	Time Switch Mechanism	T104M	1.5	135.02
4	Tripper - Time Switch (1) ON (1) OFF per pack	156T1978A	0.3	3.33
5	Relay	143T135	0.5	45.98
6	Thermostat	178T24	1.0	50.16
7	Plate - Mechanism	2400021	1.0	35.2
8	Plate - Dead Front	24TP6019-WWH	1.5	22.81
9	Terminal Bar - Grounding	PA116	0.5	17.41
10	Case - Enclosure	2TP3388A-WWH	6.0	82.02
11	Latch - Enclosure	PA117	0.3	13.99
12	Bracket - Enclosure ea.	22T713	1.0	13.55

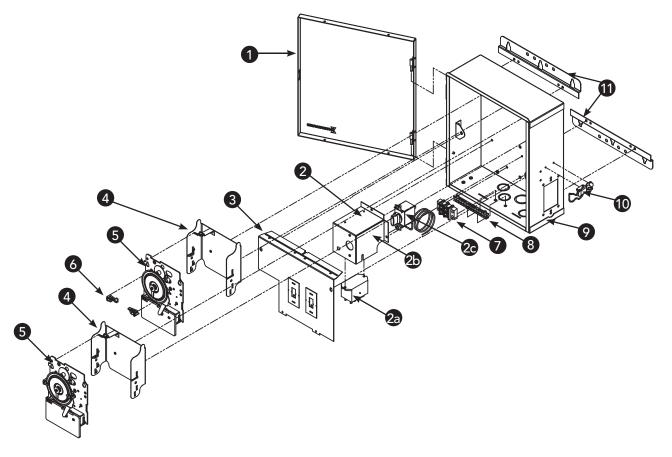
<sup>\*</sup> Prices are subject to change without notice





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **PF1202T Freeze Protection Control**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6TP2819A-WWH	3.0	45.12
2	Complete Thermostat Assembly - Pre Wired	PA102	2.5	92.05
2a	Relay	143T135	0.5	45.98
2b	Plate - Thermostat Housing	2200022	1.0	20.63
2c	Thermostat	178T24	1.0	50.16
3	Plate - Dead Front	24PF6022-WWH	1.5	22.81
4	Bracket - Time Switch	22T338GR	0.8	9.62
5	Time Switch Mechanism	T104M	1.5	135.02
6	Tripper - Time Switch (1) ON (1) OFF per pack	156T1978A	0.3	3.33
7	Terminal - Power	130LV1091	0.3	15.88
8	Terminal Bar - Grounding	PA116	0.5	17.41
9	Case - Enclosure	2PF3377A-WWH	6.0	76.87
10	Latch - Enclosure	PA117	0.3	13.99
11	Bracket - Enclosure, each	22T713	1.0	13.55

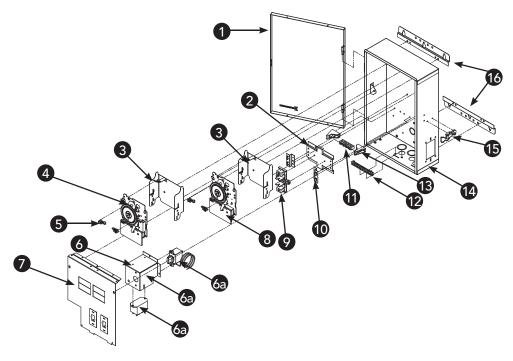
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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **PF1222TB Freeze Protection Control**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6RC2344A	4.0	48.56
2	Plate - Breaker Mounting	24T5493	1.0	12.82
3	Bracket - Time Switch	22T338GR	0.8	9.62
4	Time Switch Mechanism #1	T104M201	1.8	181.98
5	Tripper - Time Switch (1) ON (1) OFF per pack	156T1978A	0.3	3.33
6	Complete Thermostat Assembly - Pre Wired	PA102	2.5	92.05
6a	Relay	143T135	2.0	45.98
6b	Plate - Thermostat Housing	24T5189	0.5	22.69
6c	Thermostat	178T24	1.0	50,19
7	Plate - Dead Front	24T5473	1.0	47.66
8	Time Switch Mechanism #2	T104M	1.5	135.02
9	Breaker Base	124T2375	0.5	31.41
10	Bracket - Breaker	22T675	0.3	7.43
11	Terminal Bar - Neutral	130T1181	0.5	14.96
12	Terminal Bar - Grounding	PA116	0.5	17.41
13	Bracket - Terminal Mounting	22T676	0.3	6.45
14	Case - Enclosure	2PF3380A-WWH	6.5	72.87
15	Latch - Enclosure	PA117	0.3	13.99
16	Bracket - Enclosure, each	22T713	1.0	13.55

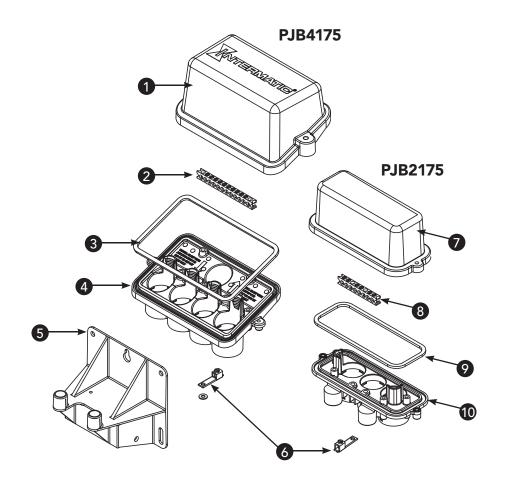
<sup>\*</sup> Prices are subject to change without notice





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

PJB2175 Two Light Capacity Swimming Pool Junction Box PJB4175 Four Light Capacity Swimming Pool Junction Box



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - PJB4175	600017	1.5	18.37
2	Terminal Bar - grounding	130PA1347	0.5	14.55
3	Gasket	165PA156	0.5	10.34
4	Base - available as complete unit	PJB2175/PJB4175	-	See Price List
5	Mounting Bracket	PA114	1.5	6.81
6	Bonding Lug	130PA1348	0.5	10.35
7	Cover - PJB2175	6PA2988	1.0	14.45
8	Terminal Bar - Grounding	130T1238	0.5	11.66
9	Gasket	165PA173	0.5	8.78
10	Base - available as complete unit	PJB2175	-	See Price List

<sup>\*</sup> Prices are subject to change without notice

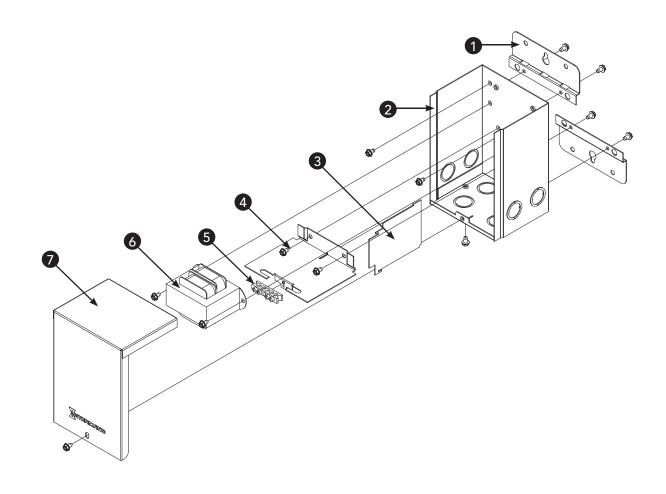


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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## PX100 and PX300 Pool/Spa Light Transformers

Model No.	Item No. 6	Shipping Wt. (lb.)	*List Price (\$)
PX100	119T267	3.5	67.58
PX300	119T340	9.0	88.76



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Bracket - Mounting (1) per pack	22T608	0.5	14.56
2	Housing - Enclosure	24T5155	3.0	38.06
3	Plate - Divider, Vertical	24T5154-WWH	0.5	13.31
4	Plate - Divider, Horizontal	24T5169-WWH	0.5	16.48
5	Terminal Bar - Grounding	130T1103	0.3	13.84
6	Transformer	See Table Above	_	_
7	Cover - Enclosure	6T1930	1.5	24.13

<sup>\*</sup> Prices are subject to change without notice

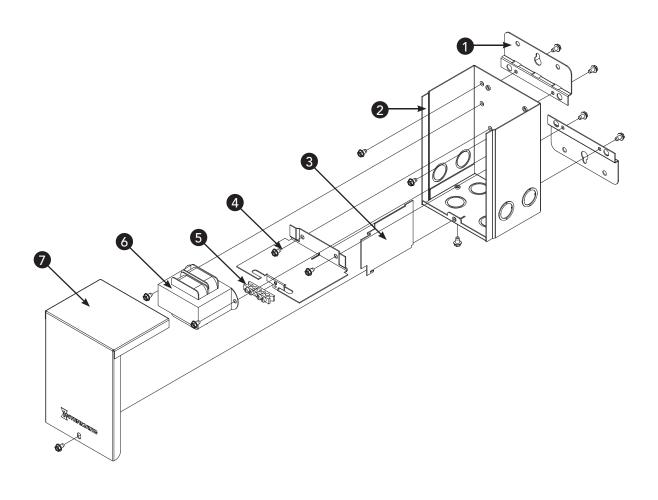




**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## PX100S and PX300S Pool/Spa Light Transformers

Model No.	Model No. Item No. 6		*List Price (\$)
PX100S	119T267	3.5	67.58
PX300S	119T340	9.0	88.76



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Bracket - Mounting (1) per pack	2200031-SSS	0.5	17.27
2	Housing - Enclosure	2400078-SSS	3.0	69.48
3	Plate - Divider, Vertical	24T5661-SSS	0.5	15.62
4	Plate - Divider, Horizontal	24T5169	0.5	16.47
5	Terminal Bar - Grounding	130T1103	0.3	13.84
6	Transformer	See Table Above	-	-
7	Cover - Enclosure	6T2395-SSS	1.5	43.01

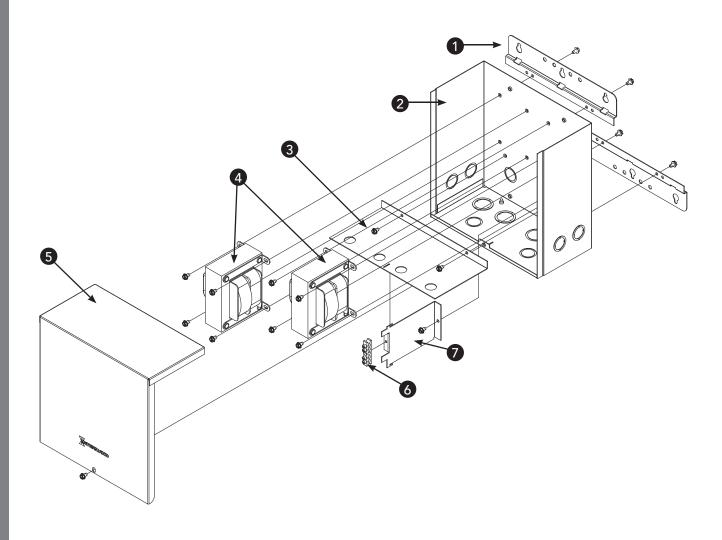
<sup>\*</sup> Prices are subject to change without notice



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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## **PX600 Pool/Spa Light Transformer**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Bracket - Mounting, each	2200004-WWH	0.8	12.45
2	Case - Enclosure	2PX3342	4.0	33.57
3	Plate - Divider, Horizontal	24PX5947	1.0	17.4
4	Transformer, each	119T340	9.0	88,76
5	Cover - Enclosure	6PX2751	2.0	25.32
6	Terminal Bar - Grounding	130T1103	0.3	13.84
7	Bracket - Divider	22PX923	0.5	10.10

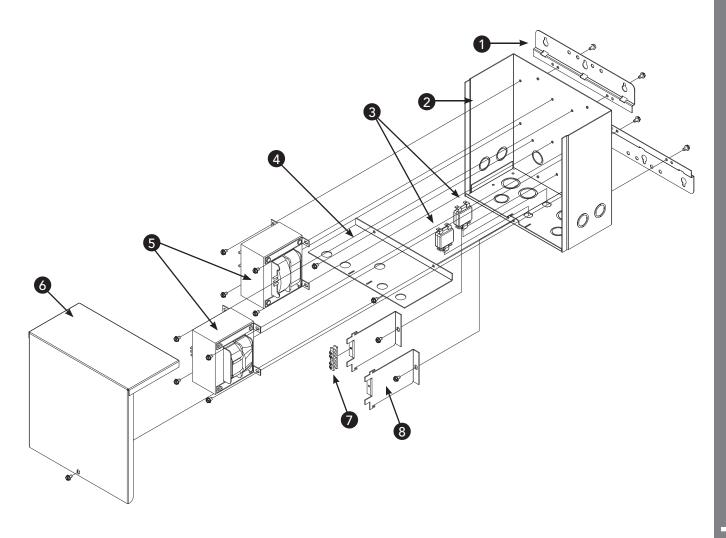
<sup>\*</sup> Prices are subject to change without notice





REPLACEMENT PARTS - POOL/SPA CONTROLS

## **PX600S Pool/Spa Light Transformer**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Bracket - Mounting, each	22PL977-SSS	1.0	17.10
2	Case - Enclosure	2PL3410-SSS	4.0	155.4
3	Circuit Protector, each	121AL415	0.3	19.49
4	Plate - Divider, Horizontal	24PL6095-SSS	1.0	32.32
5	Transformer, each	119PX608	9.0	121.1
6	Cover - Enclosure	6PL2873-SSS	2.0	109.6
7	Terminal Bar - Grounding	130T1103	0.3	13.84
8	Bracket - Divider	22PL976-SSS	0.5	16.21

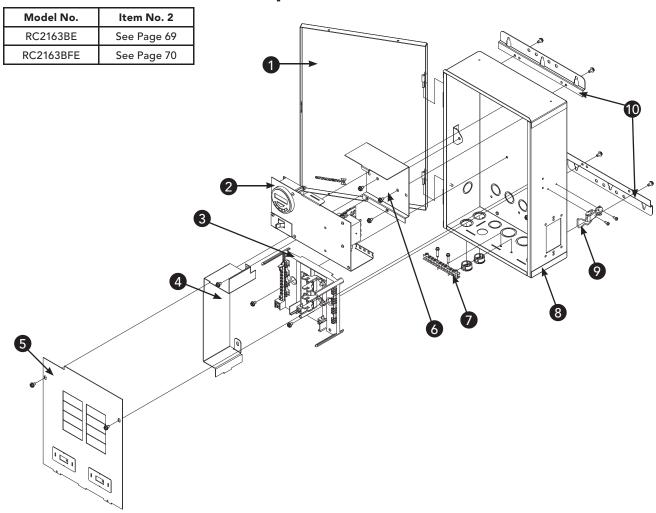
<sup>\*</sup> Prices are subject to change without notice





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## **RC2000BE Series Pool-to-Spa Control Panels**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6RC2344A	3.5	48.56
2	Housing Assembly	See Table Above	-	-
3	Breaker Base	124T2530A	1.5	37.9
4	Plate - Divider	24AS6061-WWH	2.0	31.26
5	Plate - Dead Front	24AS6060 -WWH	2.0	2644
6	Plate - Mech. Mounting	24RC5603	1.5	28.49
7	Terminal Bar - Grounding	PA116	0.5	17.41
8	Case - Enclosure	2AS3398A-WWH	6.5	87.46
9	Latch - Enclosure	PA117	0.3	13.99
10	Bracket - Enclosure, each	22T713	1.0	13.55

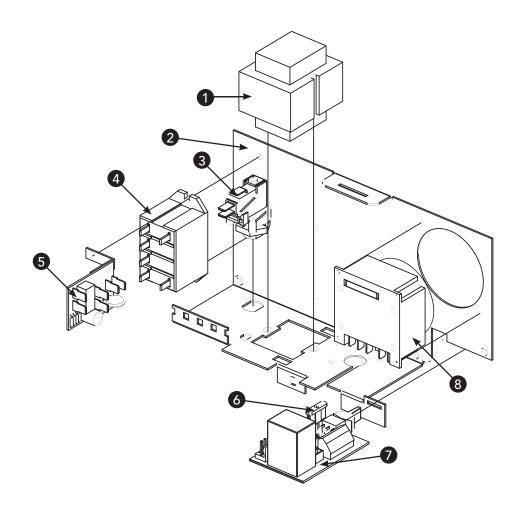
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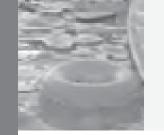
**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## Housing Assembly for RC2163BE



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Transformer	119RC335A	2.0	53.04
2	Plate - Housing	24AS6151-WWH	1.5	25.92
3	Switch - Air	133RC1144	0.3	20.07
4	Relay - Pump	143RC151	0.5	45.98
5	P.C. Board - LV (Part of item 7)	-	-	-
6	Fuse	121RC52	0.3	12.32
7	P.C. Board - Control	118RC1363A	0.5	166.03
8	Timer	PB313E	0.5	24.00

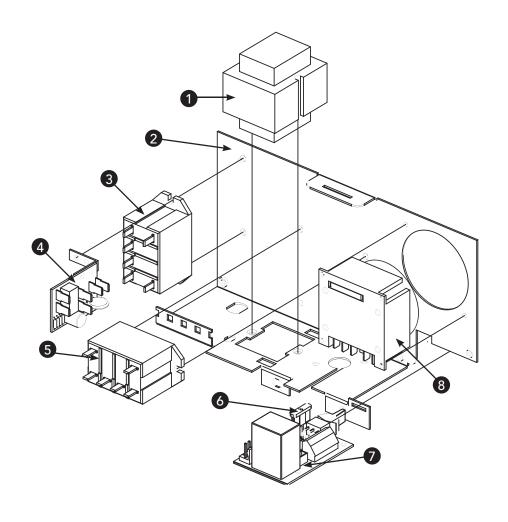
<sup>\*</sup> Prices are subject to change without notice



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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## Housing Assembly for RC2163BFE



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Transformer	119RC335A	2.0	53.04
2	Plate - Housing	24AS6151-WWH	1.5	25.92
3	Relay - Pump	143RC151	0.5	45.98
4	P.C. Board - LV (Part of item 7)	-	-	-
5	Relay - Low Voltage	143RC151	0.5	45.98
6	Fuse	121RC52	0.1	12.32
7	P.C. Board - Control	188RC1712A	0.5	187.48
8	Timer	PB313E	0.5	24.00

<sup>\*</sup> Prices are subject to change without notice

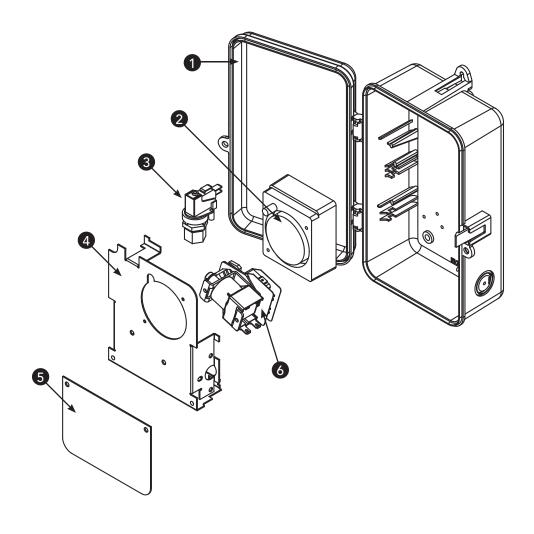




**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## RC2000P and RC2000PT Series Air Actuated Controls

Model No.	Model No. Item No. 6		*List Price (\$)
RC2123PT	RC2123PT 143RC126		61.03
RC2343PT	143RC140	2.5	89.04



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Enclosure	2RC2925A	3.0	83.69
2	Timer	PB913M8K	0.5	24.00
3	Air Switch - Momentary	133RC1144	0.3	20.07
4	Plate - Mech. Mounting	2400040-WWH	1.0	35.29
5	Dead Front - Wiring Compartment	2400065	1.0	14.82
6	Relay	See Table Above	-	-

<sup>\*</sup> Prices are subject to change without notice

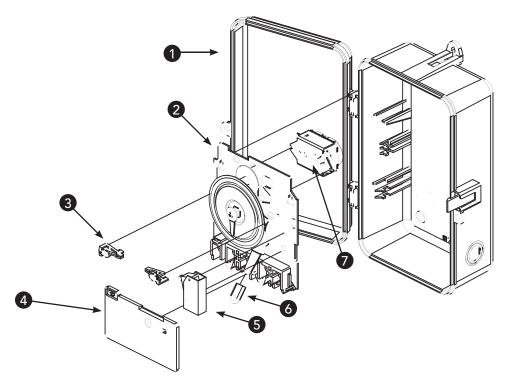


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### **REPLACEMENT PARTS - POOL/SPA CONTROLS**

### **T100 Series Time Switches**

Model No.	Item No. 1	Item No. 2	Item No. 5	Item No. 6
T101P3	2T2502GA	T101M	None	WG1570-10
T101R3	2T2485GA	T101M	None	WG1570-10
T101P201	2T2502GA	T101M201	156T1042A	WG430-10
T101R201	2T2485GA	T101M201	156T1042A	WG430-10
T104P3	2T2502GA	T104M	None	WG1573-10
T104R3	2T2485GA	T104M	None	WG1573-10
T104P201	2T2502GA	T104M201	156T1042A	WG433-10
T104R201	2T2485GA	T104M201	156T1042A	WG433-10



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Enclosure	See Table Above	3.0	83.69
2	Switch Mechanism - Complete	See Table Above	1.5	135.02†
3	Tripper, (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
4	Insulator - Terminals (10) per pack	124T2411A	0.5	15.34
5	Switch - Heater (Fireman)	See Table Above	0.5	27.00
6	Insulator - Slave (10) per pack	156T6738A	0.3	4.77
7	Motor - Clock	See Table Above	0.5	34.21

<sup>\*</sup> Prices are subject to change without notice

<sup>†</sup> Price may vary depending on model selected





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **T10000R Series Control Centers**

	Item No. 3	Item No. 7
T10000R	None	None
T10004R	None	T104M
T10101R	T101M	T101M
T10404R	T104M	T104M
T10604R	T106M	T104M
T12404R	T104M201	T104M
	3	2

Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6TP2819A-WWH	3.0	45.12
2	Bracket - Time Switch	22T338GR	0.8	9.62
3	Time Switch Mechanism #1	See Table Above	1.5	135.02†
4	Tripper - Time Switch, (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
5	Plate - Filler	24T5796-WWH	0.8	16.72
6	Plate - Dead Front	24TP6019-WWH	1.5	22.81
7	Mechanism #2	See Table Above	1.5	135.02†
8	Terminal Bar - Grounding	PA116	0.5	17.41
9	Case - Enclosure	2TP3388A-WWH	6.0	82.01
10	Latch - Enclosure	PA117	0.3	13.99
11	Bracket - Enclosure - Each	22T713	1.0	13.55

<sup>\*</sup> Prices are subject to change without notice

<sup>†</sup> Price may vary depending on model selected

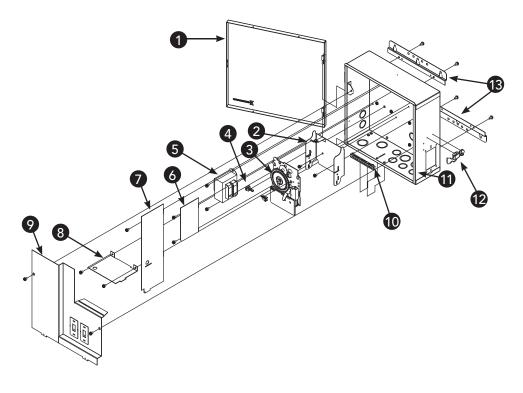


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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## **T10000RT Series Control Centers**

Model No.	Item No. 5	Shipping Wt. (lb.)	List Price (S)*	
T10004RT1	T10004RT1 119T267		67.58	
T10004RT3	119T340	9	88.76	



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6TP2834A-WWH	3.0	39.84
2	Bracket - Time Switch	22T338GR	0.8	9.62
3	Time Switch Mechanism	T104M	41.5	135.02
4	Tripper - Time Switch, (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
5	Transformer	See Table Above	-	-
6	Plate - Divider	24TP6058-WWH	0.5	30.07
7	Plate - Barrier	24TP6059-WWH	0.8	28.88
8	Plate - Transformer	24TP5731-WWH	0.5	16.72
9	Plate - Dead Front	24TP6057-WWH	2.0	37.10
10	Terminal Bar - Grounding	PA116	0.5	17.41
11	Case - Enclosure	2TP3397A-WWH	6.0	86.77
12	Latch - Enclosure	PA117	0.3	13.33
13	Bracket - Enclosure - Each	22T713	1.0	13.55

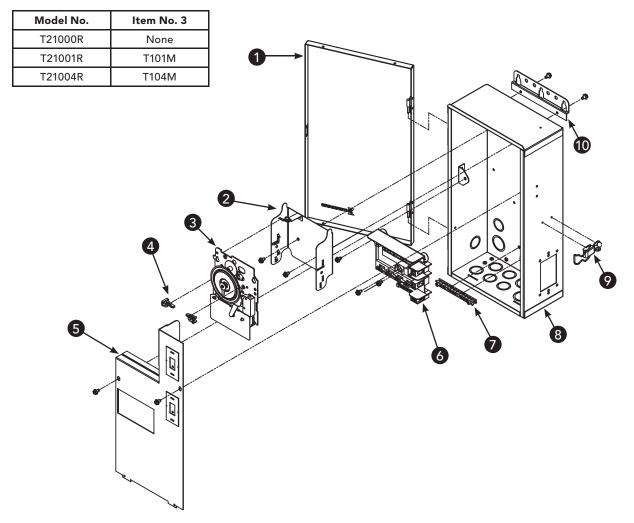
<sup>\*</sup> Prices are subject to change without notice





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **T21000R Series Control Panels**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6TP2776A	3.0	38.72
2	Bracket - Time Switch	22T338GR	0.8	9.62
3	Time Switch Mechanism	See Table Above	1.5	135.02†
4	Tripper - Time Switch, (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
5	Plate - Dead Front	24TP5983A	1.8	40.57
6	Breaker Base	124TP2608A	1.5	34.70
7	Terminal Bar - Grounding	PA116	0.5	17.41
8	Case - Enclosure	2TP3350A	6.0	82.08
9	Latch - Enclosure	PA117	0.3	13.99
10	Bracket - Enclosure (1) per pack	22T722	0.5	13.36

<sup>\*</sup> Prices are subject to change without notice

<sup>†</sup> Price may vary depending on model selected



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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## **T30000R Series Control Panels**

0000R5	Item No. 3	Item No. 8
30000113	None	None
T30004R	None	T104M
T30401R	T104M	T101M
T30404R	T104M	T104M
T32404R	T104M201	T104M
T30604R	T106M	T104M
<b>5</b>	3	

Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6RC2344A	3.5	48.62
2	Bracket - Time Switch	22T338GR	0.8	9.62
3	Time Switch Mechanism #1	See Table Above	1.5	135.02†
4	Tripper Time Switch - (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
5	Plate - Filler	24T5796-WWH	0.8	16.72
6	Plate - Dead Front	24T5762	2.0	47.45
7	Breaker Base	124T2530A	1.5	37.90
8	Time Switch Mechanism #2	See Table Above	1.5	135.02†
9	Terminal Bar - Grounding	PA116	0.5	17.41
10	Case - Enclosure	2T3130A	6.5	78.65
11	Latch - Enclosure	PA117	0.3	13.99
12	Bracket - Enclosure, each	22T713	1.0	13.55

<sup>\*</sup> Prices are subject to change without notice

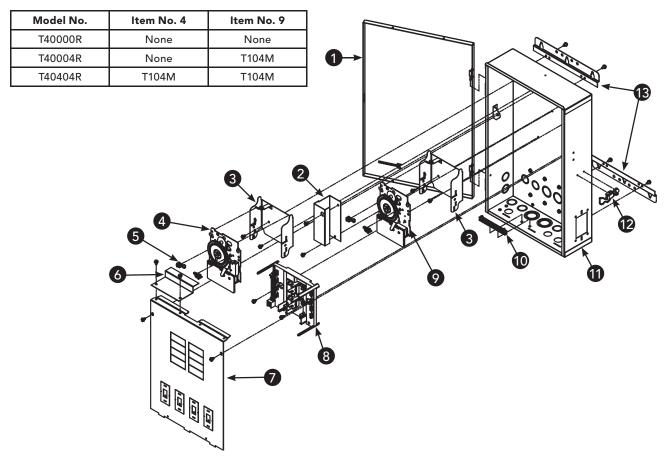
<sup>†</sup> Price may vary depending on model selected





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## **T40000R Series Control Panels**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6T2496A-WWH	5.0	48.36
2	Plate - Wire Shield	24T5055-WWH	1.0	17.89
3	Bracket - Time Switch	22T338GR	0.8	9.62
4	Time Switch Mechanism #1	See Table Above	1.5	135.02†
5	Tripper - Time Switch (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
6	Plate - Filler	24T5796-WWH	0.8	16.72
7	Plate - Dead Front	24T5741-WWH	3.5	55.84
8	Breaker Base	124T2530A	1.5	37.90
9	Time Switch Mechanism #2	See Table Above	1.5	135.02†
10	Terminal Bar - Grounding	PA116	0.5	17.41
11	Case - Enclosure	2T3120A-WWH	11.0	96.20
12	Latch - Enclosure	PA117	0.3	13.99
13	Bracket - Enclosure - Each	22T713	1.0	13.55

<sup>\*</sup> Prices are subject to change without notice

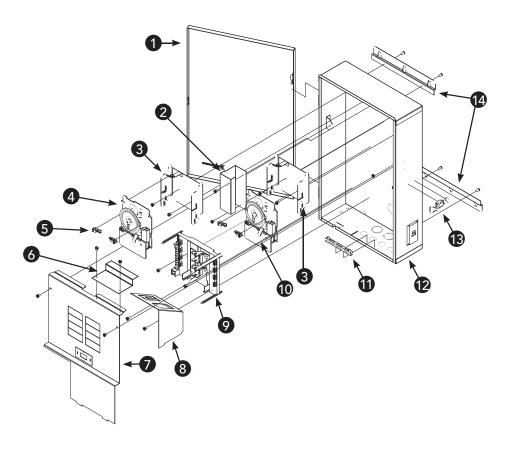
<sup>†</sup> Price may vary depending on model selected



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**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

## **T40000R4 Control Panel**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6T2496-WWH	5.0	48.36
2	Plate - Wire Shield	24T5055-WWH	1.0	17.86
3	Bracket - Time Switch	22T338GR	0.8	9.62
4	Time Switch Mechanism #1	None	-	-
5	Tripper - Time Switch (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
6	Plate - Filler	24T5796-WWH	0.8	16.72
7	Plate - Dead Front	24T5744	3.5	37.90
8	Plate - Receptacle	24T5312	41.0	27.28
9	Breaker Base	124T2530A	1.5	37.90
10	Time Switch Mechanism #2	None	-	-
11	Terminal Bar - Grounding	PA116	0.5	17.41
12	Case - Enclosure	2T3124A	11.0	96.20
13	Latch - Enclosure	PA117	0.3	13.99
14	Bracket - Enclosure - Each	22T713	1.0	13.55

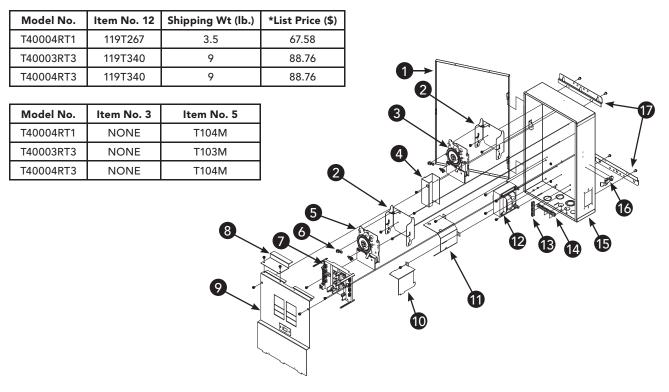
<sup>\*</sup> Prices are subject to change without notice





**REPLACEMENT PARTS - POOL/SPA CONTROLS** 

### **T40000RT Series Control Panels**



Item No.	Description	Part No.	Shipping Weight (lb.)	*List Price (\$)
1	Cover - Enclosure	6T2496A-WWH	5	48.36
2	Bracket - Time Switch	22T338GR	0.8	9.62
3	Time Switch Mechanism #1	See Table Above	-	-
4	Plate - Wire Shield	24T5055-WWH	1	17.86
5	Time Switch Mechanism #2	See Table Above	1.5	135.02†
6	Tripper - Time Switch (1) ON - (1) OFF per pack	156T1978A	0.3	3.33
7	Breaker Base	124T2530A	1.5	37.90
8	Plate - Filler	24T5796-WWH	0.8	16.72
9	Plate - Dead Front	24TP5738	3.5	37.90
10	Plate - LV	24TP5971	1	17.69
11	Plate - Transformer	24TP5740	1	19.91
12	Transformer	See Table Above	-	-
13	Terminal - Grounding 6 Pole	130T1238	0.5	14.87
14	Terminal Bar- Grounding, 10 Pole	PA116	0.5	17.41
15	Case - Enclosure	2TP3117A-WWH	11	94.50
16	Latch - Enclosure	PA117	0.3	13.99
17	Bracket - Enclosure ea.	22T713	1	13.55

<sup>\*</sup> Prices are subject to change without notice

<sup>†</sup> Price may vary depending on model selected



## **Obsolete/Substitution Chart**

### For a complete and current Obsolete/Subtitution list please visit www.intermatic.com

Old Model	Substitution
P1102FE	P1103FE
P1102ME	P1103FE
P1103ME	P1103FE
P1161	P1261P
P1203FR	P1103FE, RC613 & RC939
P1261PE	P1261P
P7101ME	P7103ME
P7102ME	P7103ME
PE153W	PE153 & 133PE1484A
PE153WF	PE153, 133PE1484A, 178PA28A

Old Model	Substitution
PE950	PE953
RC2103E	RC2103S
RC2112S	RC2103S
RC2123MT	RC2123PT
RC2123S	RC2123PT
RC2133M	RC2123PT
RC2133P	RC2123PT
RC2163E	RC2163BE
RC2163FE	RC2163BFE
RC2233P	(2) RC2103S
RC2263BE	RC2163BE & RC2103S

Old Model	Substitution
RC2263E	RC2163BE & RC2103S
RC2343M	RC2343PT
RC2343MT	RC2343PT
RC2343P	RC2343PT
RC2403RT	RC2343PT & RC2103S
RC4F	RC4G
T40004R5	T40000R4
T40404R5	T40000R4

Notes:			

Notes:	



Notes:		

## "Try Me" Program

## Intermatic Pool/Spa Controls "Try Me Program"

Check Appropriate Boxes:

Ti	tle 20 C	ompliant Prod	ucts	
☐ <i>NEW</i> Multi-Wave PE6	53RC – Wireles	ss 5 Circuit Pool/Spa/Variable Speed S	ys w/Wireless Cont	rol <b>\$288.75</b>
☐ I-Wave PE45343RCT3 –	5 Circuit Pool/Spa 2 actuators and 30	Control with wireless transceiver, 00 Watt transformer.		\$899.02
☐ I-Wave PE45343RC - 5 (	Circuit Pool/Spa Cor reless transceiver ar			\$870.98
☐ Pool/Spa-Wave PE2530	<b>ORC –</b> 3 Circuit D	Digital Control in Outdoor Enclosure w/	60 Amp Buss	\$367.50
☐ 2 Speed Control PE153	- 3 Circuit Digital (	Control		\$161.05
☐ 2 Speed Control P1353I	ME – 3 Circuit Dig	gital Control Mechanism		\$141.73
☐ <i>NEW</i> Wave–Series PES		ireless Hand-Held Transciver for Nodels w/Backlit Display		\$126.79
☐ Multi-Wave PE1541RC	- 4 Circuit Pool/Spa	a Control with wireless transceiver and	2 actuators	\$589.05
☐ Pool-Wave PE1501RC -	- 4 Circuit Pool/Spa	Control with wireless transceiver		\$498.33
☐ Actuator Control P4243	ME – 2 Circuit Va	alve/Pump Switch Mechanism		\$155.45
☐ Actuator PE24VA - 24 VA	C Motorized Valve F	Actuator		\$49.61
☐ 1-Wave PE030 & PE930	- Wireless parier in	ounted transceiver and wireless hand-	neid transceiver	\$242.55
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For more information visit www.poolandspacontrols.com