

# 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 two-speed 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)

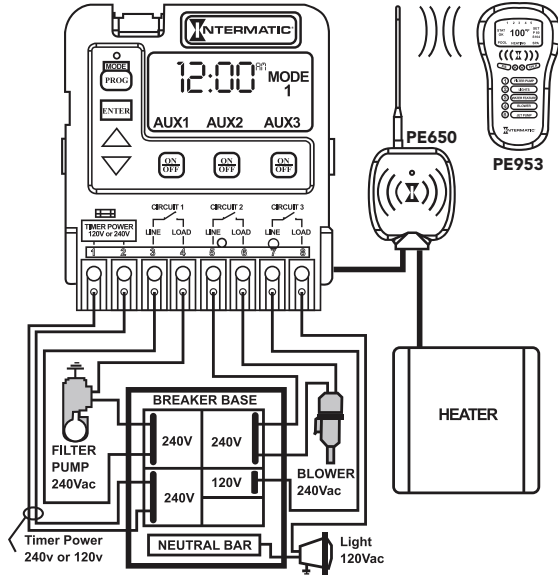
###### Break both lines

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)

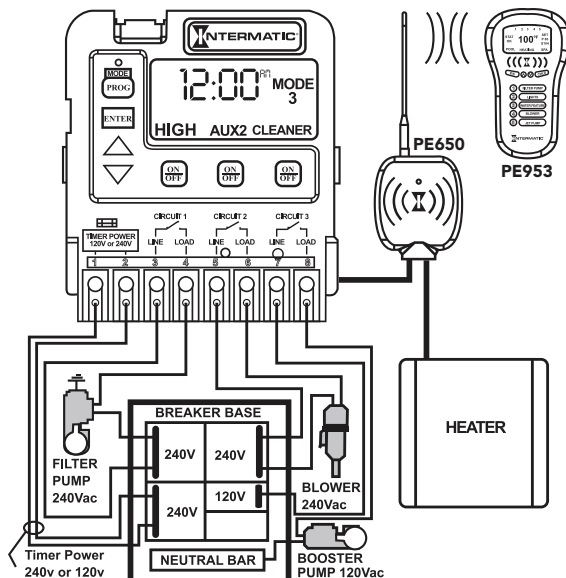
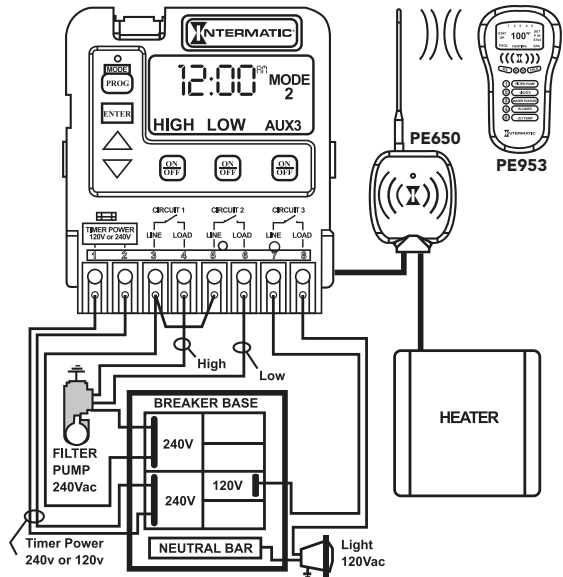
Each of the three single pole circuits are defined generically, and can control any load within each of its individual circuit ratings. All three circuits act independent of each other.

**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)

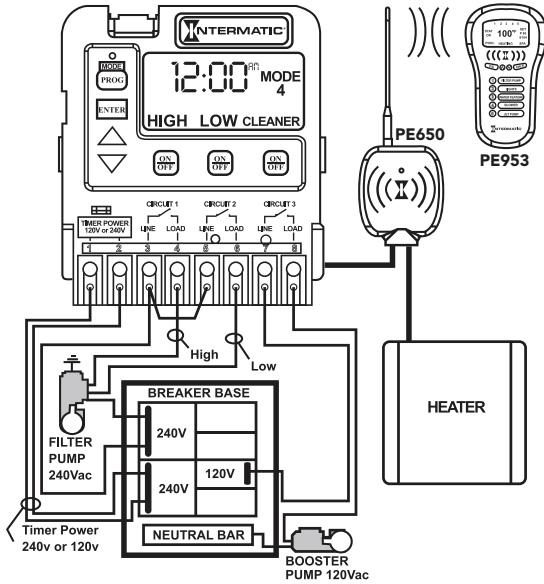
Circuits one and three are dedicated single pole outputs for a single speed pump working with a pressure side cleaner pump. Circuit three will never come ON unless circuit one is ON for at least one minute, consistent with a pressure side cleaner pump. Circuit two is a single pole circuit for a generic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

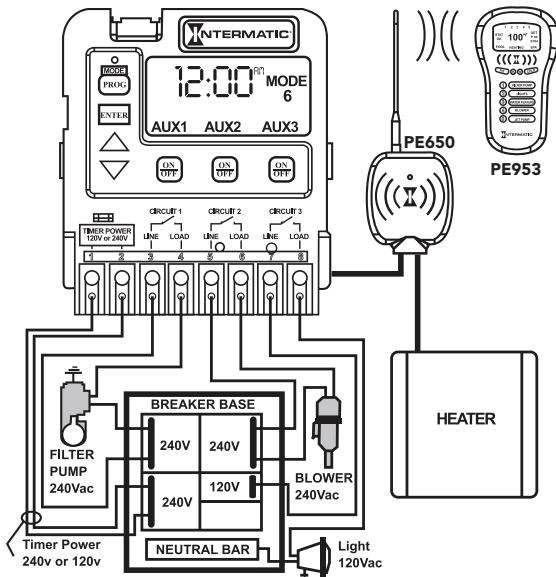
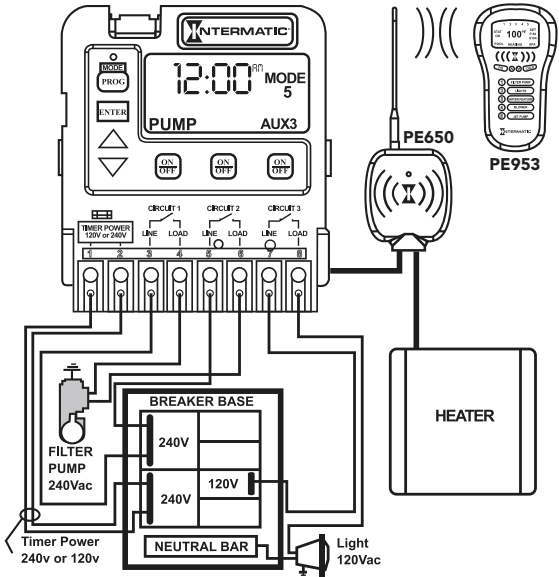
Circuits one and two are dedicated single pole outputs for a two-speed pump load. Circuits one and two will never be ON at the same time, consistent with a two-speed pump application. Circuit three is also a dedicated single pole output for a pressure side cleaner pump. Circuit three will never come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

