

MODEL: T10604R

CONTROL PANEL WITH TWO TIME SWITCHES



**IN RAINPROOF (TYPE 3R) ENCLOSURE FOR INDOOR/OUTDOOR USE
SUITABLE FOR TWO SPEED SWIMMING POOL/SPA FILTER PUMP APPLICATIONS AND
FOR DIRECT CONNECTION OF UNDERWATER LIGHTS.**

92 AMP PER LEG, 168 AMP MAX., 120/240 VOLT OR 120/208 VOLT SINGLE PHASE, (THREE WIRE) AC.

IMPORTANT: This Control Panel must be installed according to the National Electrical Code (including Article 680) or Canadian Electrical Code (including Section 68) and Local Electrical Codes. This installation is subject to the approval by the local inspection authority. **USE COPPER CONDUCTORS ONLY.** Do not exceed the maximum ratings of individual components, wiring devices, and current carrying capacity of conductors. For grounding of the installation, refer to Article 250 and 680 of the National Electrical Code. (For Canadian Installations: Section 10 and 68 of the Canadian Electrical Code). Install only APPROVED wiring device(s) inside the enclosure. An APPROVED wiring device may be installed in the rectangular side knockout provided. When panel is outdoors, an APPROVED rainproof cover must be installed over the wiring device in the side knockout. If this enclosure is used for direct connection of underwater lights, refer to 1999 NEC 680-21(b), 2002 NEC 680-24(b) or CEC 680-060, 062 and 066 for further details. This Control should not be connected to any equipment which would cause bodily injury or property damage should it be activated unexpectedly. After wiring, install front panel over wiring compartment.

KEEP DOOR CLOSED AT ALL TIMES.

NOTES:

- Any Intermatic T100M or ET100CM series Time Switch, P1353ME 3 Circuit Control, PF1000M Series Freeze Protection or RC2000M Series Air Switch Mechanism may be installed in the bracket provided or in the event an existing mechanism is replaced.
- If this control panel requires bonding, attach an APPROVED bonding terminal of a suitable size using the mounting hole(s) provided on the bottom of the enclosure (156T11047A may be ordered).
- Wiring devices may be installed in this control panel (order 21T156A (4) Standoffs for mounting).

TIME SWITCH RATINGS:

SINGLE POLE DOUBLE THROW (SPDT) - T106M

DOUBLE POLE SINGLE THROW (DPST) - T104M

30 AMP, RESISTIVE, INDUCTIVE, TUNGSTEN

OR 1000 VA PILOT DUTY-120/208/240 VAC

2 HP (24 FLA)-120 VAC 5 HP (28 FLA)-240 VAC

CLOCK MOTOR:208/277 VOLTS - 60 HZ.

(TO ORDER CLOCK MOTOR REPLACEMENT, SPECIFY PART NO.

WG-ON MOTOR COVER)

TO WIRE:

- Remove clock motor leads from **Terminals A and 3 of T106M** and connect to **Terminals 1 and 3 of T104M**. Connect **LINE 1** to **Terminal 1** and **LINE 2** to **Terminal 3 of T104M**.
- Install jumpers between **Terminals 1 and 4 of T106M** and between **Terminal 2 of T104M** and **Terminal 1 of T106M**.
- Connect **COMMON** of Two Speed Pump to **Terminal 4 of T104M**, **LOW** to **Terminal 2 of T106M** and **HIGH** to **Terminal 3 of T106M**.

If heater protection is required, install FIREMAN SWITCH On T104M Mechanism plate - order 156T4042A Switch kit separately.

GROUND INSTALLATION.

TO SET DAILY SCHEDULE:

- Set **Time of Day** on both time switches by pulling then turning dials until the correct time of the day (AM or PM) lines up with pointer.
- Place **ON** and **OFF** trippers on **T104M** dial at times when pump should **start** and **stop** operating.
- Place **ON** trippers on **T106M** dial when pump should switch from **low** to **high** and **OFF** trippers when pump should switch from **high** to **low**.

Example:

6 AM - Turn **ON**, high speed. (Place **ON** tripper on T104M dial at 6 AM)

9 AM - Switch from **high** to **low** speed. (Place **OFF** tripper on T106M dial at 9 AM)

3 PM - Switch from **low** back to **high** speed.

(Place **ON** tripper on T106M dial at 3 PM)

6 PM - Turn **OFF**. (Place **OFF** tripper on T104M dial at 6 PM)

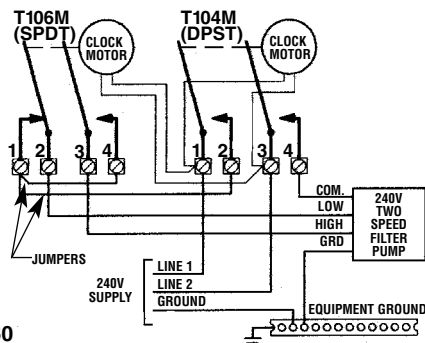
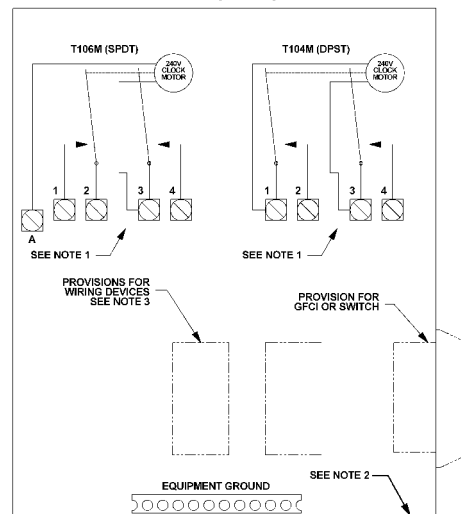
OPERATING INSTRUCTIONS:

- To Turn **ON/OFF** Pump manually - move lever of T104M to ON/OFF.
- To switch speed manually while pump is operating - move lever of T106M to opposite position.
- For more than one daily schedule - place additional tripper pairs on dials.
- In case of power failure - reset both dials to proper time of day - see Step 1 above.

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158TP10860

WIRING INFORMATION - COPPER CONDUCTORS ONLY					
WIRE SIZE 75°C MIN INSULATION	TERMINAL TORQUE	MAX MOTOR LOAD (CONTINUOUS DUTY)		GENERAL PURPOSE BRANCH CIRCUIT BREAKER RATING	GENERAL PURPOSE BRANCH CIRCUIT MAXIMUM CURRENT CAPACITY
		120V.	240V.		
AWG	LB-IN	HP	AMP	AMP	AMP
14	20	1/2	1	15	12
12	20	1	2	20	16
10	20	1 1/2	3	30	24
8	25	2	5	40	32





Mechanical Controls



T10000R



T10004R



T10404R



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 or P4243ME or T100M or RC2000M or PF1000M Series mechanisms.

Applications:

- Filter Pumps/Booster Pump Combinations
- Filter Pump/Light Controls
- Pool/Spa Combinations
- Landscape or HID Lighting
- Signs

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 1/4 in. (10.8 cm) D

Knockouts: Five combination 1/2 – 3/4 in. and two combination 3/4 – 1 in. knockouts on the bottom. One combination 1/2 – 3/4 in. on the left side and one combination 3/4 – 1 in. on the back. One knockout 1 3/4 x 2 3/4 in. on the right side for mounting switches or GFCI

Center Rating: 92 Amp per leg, 168 Amp Max. 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
T10000R	Enclosure Only	None	NA/NA	9.3 lbs (4.2 kg)
T10004R	One T104M	NA/DPST	NA/240	10.5 lbs (4.7 kg)
T10101R	Two T101M	SPST/SPST	120/120	11.0 lbs (5.0 kg)
T10404R	Two T104M	DPST/DPST	240/240	11.0 lbs (5.0 kg)
T10604R*	T106M & T104M	SPDT/DPST	240/240	11.0 lbs (5.0 kg)
T12404R**	T104M201 & T104M	DPST/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 130 for a detailed list of replacement mechanisms.