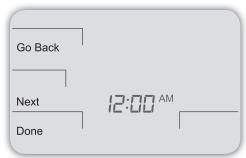




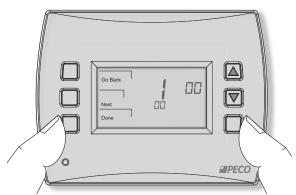
QUICK START GUIDE PERFORMANCE PRO T4000

 $\widehat{\mathbf{1}}$ SET CLOCK, YEAR, MONTH, DAY



- Press ▲/ ▼ to select 12 or 24 HR mode, then press Next.
- 2. Press ▲/ ▼to select clock hour, then press Next.
- 3. Press ▲/▼to select clock minutes, then press Next.
- 4.Press ▲/ ▼ to select clock year, then press Next.
- 5. Press ▲/ ▼ to select current month, then press Next. Note: Mo (month) appears.
- 6.Press ▲/ ▼to select current date.
 - Note: Days appears.
- 7. Press Done to finish clock mode.

2 ACCESS SERVICE MENUS



- 1. Hold lower right and lower left keys for five seconds.
- 2. Press Next or Go Back button to select a Service Menu.
- 3. Press ▲/ ▼ to select Menu option.
- 4. Press Done when complete.

3 CONFIGURE SERVICE MENUS

The following Service Menus (SM) commonly require configuration. Please verify that these are set for your specific application. Additional configuration may be required. Refer to Table 2 for all available Service Menus.

- SM 100 = Programmable or Nonprogrammable
- SM 110 = System Type
- SM 120 = Fan Control
- SM 130 = Reversing Valve
- SM 240 = Number of Program Periods
- SM 260 = Temperature Format (°F or °C)
- SM 340 = Keypad Lockout

4) WIRING: TERMINAL DESIGNATIONS

1. Connect wires for appropriate system type (Table 1).



WARNING: DISCONNECT POWER BEFORE BEGINNING INSTALLATION.

- · CAUTION: Use copper wire only. Insulate or wire-nut all unused leads.
- · Use care to avoid electrostatic discharge to thermostat
- CAUTION: <u>Do not</u> connect unused wires together
- ALL ELECTRICAL LOADS MUST BE CONNECTED TO TERMINAL C (24 VAC).

TABLE 1. TERMINAL BLOCK DESIGNATIONS

Conventional		Heat Pump	
С	24 VAC, Unswitched side	С	24 VAC, Unswitched side
W1	Stage 1 Heat	В/О	Reversing Valve
W2	Stage 2 Heat	AUX	Auxiliary Heat
G	FAN	G	FAN
Α		Α	
E		E	
Y1	Stage 1 Cool	Y1	Compressor Stage 1, Heat/Cool 1
Y2	Stage 2 Cool (or Dehumidify)	Y2	Compressor Stage 2 Heat/Cool 2 (or Dehumidify)
RH	24 VAC Power for heating, switched side	RH	24 VAC Power for heating, switched side
RC	24 VAC Power for cooling, switched side	RC	24 VAC Power for cooling, switched side
sc	Sensor Common	sc	Sensor Common
S1	Indoor Remote Sensor	S1	Indoor Remote Sensor
S2	Occupancy Sensor	S2	Occupancy Sensor

TABLE 2. ADVANCED CONFIGURATION: SERVICE MENUS

Some Service Menus may not be available, depending on system type (SM 110).

MENU	FEATURE	OPTIONS	STD. DEFAULT	DESCRIPTION / COMMENTS
WILINU	TLATURE	— OF HONS	- STD. DEFAULT	DECORIT FIGHT COMMENTS
100	Schedule Format	0-3	1	Select the schedule format on the T4000 Series. (Menu not available on non-programmable thermostats.) 0 = nonprogrammable 1 = programmable 2 = 5-1-1 schedule 3 = 5-2 schedule
101	Daylight-Saving Time	0,1	0	Select daylight-saving time as it follows standard format in U.S.: It begins second Sunday of March at 2:00 AM and ends on the first Sunday of November at 2:00 AM. 0 = Disabled 1 = Enabled (2007 U.S. Format)
110	System Type	1-13	1	Select the appropriate system configuration (determines available Service Menus). 1 = 1 Heat/1 Cool conventional 2 = 1 Heat/1 Cool heat pump 3 = Heat only without fan (2-wire systems) 4 = Heat only with fan 5 = Cool only 6 = 2 Heat/1 Cool heat pump (with auxiliary heat) 7 = 2 Heat/2 Cool multistage conventional 8 = 2 Heat/1 Cool multistage conventional 9 = 1 Heat/2 Cool multistage conventional 10 = 2 Heat/2 Cool heat pump (no auxiliary heat)
120	Fan Control (heating)	0,1	0	0 = Fossil Fuel: Gas/Oil/Propane heat (equipment controls heating fan) 1 = Electric Furnace (thermostat controls heating fan)
130	O/B Reversing valve	0,1	0	When 0, output is active for cooling. When 1, output is active for heating. 0 = (O) Active with cooling 1 = (B) Active with heating
140	Auxiliary Heat	0,1	0	0 = Electric backup heat 1 = Fossil fuel backup heat
150	Backlight	0,1	0	0 = Backlight temporarily on 1 = Backlight always on (low intensity, 24V only)
170	Remote Sensor	0-1	0	Select sensor if used. Contact PECO for information on the T4000 Series Indoor Remote Zone Sensor. 0 = No Remote Sensors 1 = Indoor Sensor Only
240	Number of Program Periods	2; 4 events	4	2 = 2 events per day (Selections OCC1 and UnOcc1) 4 = 4 events per day (Selections Occ1-UnOcc1-Occ2-UnOcc2)
250	Clock format	12 or 24 Hours	12	12 = 12-hour clock mode 24 = 24-hour clock mode
260	Temperature Format (°F or °C)	0,1	1	0 = Celsius 1 = Fahrenheit
270	Fan Off Delay Heat	0-99 Seconds	0	Select the amount of time (in seconds) that the fan will run after the thermostat <u>heat</u> outputs are turned off.
280	Fan Off Delay Cool	0-99 Seconds	0	Select the amount of time (in seconds) that the fan will run after the thermostat <u>cool</u> outputs are turned off.
290	Range Low	50-90 °F or 10-32°C	50°F (10°C)	Choose the lowest selectable temperature setpoint value.
300	Range High	50-90 °F or 10-32°C	90°F (32°C)	Choose the <u>highest</u> selectable temperature setpoint value.
310	Setback Low	Off; 50-82°F or 11-27°C	55°F (13°C)	Select the heat setpoint for setback mode. 0 = Off 50-82°F (11-27°C)
320	Setback High	Off; 58-90°F or 11-32°C	90°F (32°C)	Select the cool setpoint for setback mode. 0 = Off 58-90°F (11-32°C)
330	Zone Temp Offset	+/-9°F or +/- 4.5°C	0°F (18 °C)	Adjusts the displayed value; may differ from actual zone temperature.
340	Keypad Lockout	0-3	0	Restricts access to certain features of device; Service Menu still available if enabled. 0 = No key pad lockout (Default) 1 = Disables Schedule and System keys 2 = Disables Schedule, System, and Fan keys 3 = Disables all keys

MENU	FEATURE	OPTIONS	STD. DEFAULT	DESCRIPTION / COMMENTS
341	Enable Pin Access	0,1	0	Applies a 3 digit access code to enter Service Menu 342 0 = Disable, 1 = Enable
342	Set PIN Access Code	000-999	000	Choose a 3-digit code.
350	Fan Mode Enable	1-3	3	1 = ON: Fan is turned on regardless of demand. 2 = Auto: Fan is turned on according to heating or cooling demand. 3 = ON or Auto: Allows occupant to select either 1 or 2 above.
360	System Mode Enable	0-3	1	Allows ability to determine which system modes the occupant can select. 0 = OFF, Auto (0 is NOT valid for following configurations: Heat Only; Cool Only.) 1 = OFF, Heat, Cool, Auto 2 = OFF, Heat, Cool 3 = Heat, Cool, Auto
380	Minimum Deadband Adjustment	3-10°F, 1.5-5°C	3°F	Select a changeover deadband value to prevent short cycling between heating and cooling modes. The value is adjustable to meet various HVAC system requirements.
390	Pre-Occupancy Purge	0-3 hours	0 hours	Select to energize fan for selected number of hours (0-3) prior to all occupied events.
395	Maximum Override Time Limit	0=Time until next event; or 1-4 hours	3	Restricts the duration that a temporary hold can be set. The temporary hold is limited by the maximum amount of time as defined in this Service Menu. 0 = Remainder of time until the next scheduled event. 1 = 1 Hour 2 = 2 Hours 3 = 3 Hours 4 = 4 Hours
400	Cycles Per Hour (CPH) Cooling Stage 1	0-6 CPH	0 CPH	Defines the number of cycles per hour for cooling (Stage 1). Select 0 to enable ON-OFF control for Stage 1 cooling.
410	Cycles Per Hour (CPH) Cooling Stage 2	0-6 CPH	0 CPH	Defines the number of cycles per hour for cooling (Stage 2). Select 0 to enable ON-OFF control for Stage 2 cooling.
420	Cycles Per Hour (CPH) Heating Stage 1	0-12 CPH	0 CPH	Defines the number of cycles per hour for heating (Stage 1). Select 0 to enable ON-OFF control for Stage 1 heating.
430	Cycles Per Hour (CPH) Heating Stage 2	0-12 CPH	0 CPH	Defines the number of cycles per hour for heating (Stage 2). Select 0 to enable ON-OFF control for Stage 2 heating.
450	Cycles Per Hour Heating Stage 3	0-12 CPH	0 CPH	Defines the number of cycles per hour for heating. Select 0 to enable ON-OFF control for Heating Stage 3.
460	Heat Recovery Rate	0-18°F/Hr 0-10°C/Hr	0°F/Hr	Defines the rate at which the device achieves the <u>heat</u> comfort setpoint. Select 0 to disable ramp recovery.
470	Cool Recovery Rate	0-18°F/Hr 0-10°C/Hr	0°F/Hr	Defines the rate at which the device achieves the <u>cool</u> comfort setpoint. Select 0 to disable ramp recovery.
480	Minimum Off Time	1-10 minutes	4 minutes	Sets the minimum off time for both the heat and cool output.
490	Humidity Control Enable (Select models only)			Selects how humidity will be controlled. When <u>dehumidify</u> control is enabled, the Y2 terminal becomes dehumidify. 0 = Disabled 1 = Dehumidify Control
500	Programmable/ Intermittent Fan	0-2	0	Disable Programmable Fan: Fan operates continuously in occupied periods or with demand in unoccupied periods. Intermittent Fan: Fan operates based on the on and off times set in menus 501 and 502.
501	Intermittent Fan On Time	1-60 minutes	5 minutes	Defines the on time for the Intermittent Fan.
502	Intermittent Fan Off Time	0-60 minutes	25 minutes	Defines the off time for the Intermittent Fan. Select 0 for continuous fan.

MENU	FEATURE	OPTIONS	STD. DEFAULT	DESCRIPTION / COMMENTS
520	Default Display Icons	0-4	0	Select icons that will be displayed in the Default Display screen. 0 = Time, Temp, Setpoint (SP) 1 = Time, Temp 2 = Time 3 = Temp 4 = None
530	Revision	_	_	Displays firmware revision information (for technician); not adjustable.
540	Factory Default Reset	0,1	0	Select 1 (enable) to restore factory default settings for thermostat. Select 0 to disable. 0 = Disable 1 = Enable Note: Press "Done" key to complete process.
600	System Test Main Output (Cool)	0-2	0	Select option to activate fan output for 10 minutes; select 0, Done or a different Service Menu to disable. 0 = Disable (Default) 1 = Cool Stage 1 2 = Cool Stage 2
610	System Test Main Output (Heat)	0-3	0	Select an option to activate the fan output for 10 minutes; select 0, Done or a different Service Menu to disable. Note: Outputs will be activated based upon the system configuration. 0 = Disable (Default) 1 = Heat Stage 1 2 = Heat Stage 2 3 = Heat Stage 3
620	System Test Fan Output	0,1	0	Select 0 or 1 to activate the fan output for 10 minutes; select 0, Done or a different Service Menu to disable. Note: For Service Menus 610 and 620, outputs activated based upon the system configuration 0 = Disable Fan Output 1 = Enable Fan Output Note: Outputs will be activated based upon the system configuration.