

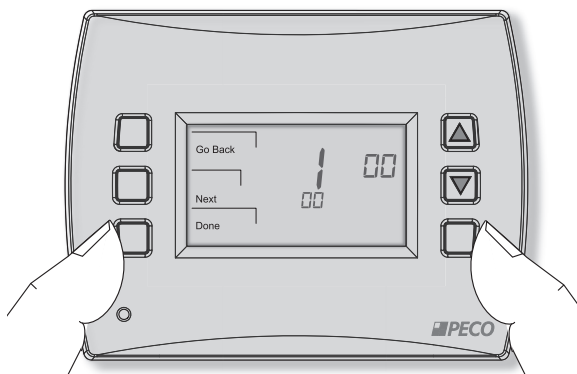


### 1 SET CLOCK, YEAR, MONTH, DAY



1. 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:** Do not connect unused wires together
- **ALL ELECTRICAL LOADS MUST BE CONNECTED TO TERMINAL C (24 VAC).**

TABLE 1. TERMINAL BLOCK DESIGNATIONS

Conventional		Heat Pump	
<b>C</b>	24 VAC, Unswitched side	<b>C</b>	24 VAC, Unswitched side
<b>W1</b>	Stage 1 Heat	<b>B/O</b>	Reversing Valve
<b>W2</b>	Stage 2 Heat	<b>AUX</b>	Auxiliary Heat (Stage 3 Heat)
<b>G</b>	FAN	<b>G</b>	FAN
<b>A</b>		<b>A</b>	
<b>E</b>		<b>E</b>	
<b>Y1</b>	Stage 1 Cool	<b>Y1</b>	Compressor Stage 1, Heat/Cool 1
<b>Y2</b>	Stage 2 Cool (or Dehumidify)	<b>Y2</b>	Compressor Stage 2 Heat/Cool 2 (or Dehumidify)
<b>RH</b>	24 VAC Power for heating, switched side	<b>RH</b>	24 VAC Power for heating, switched side
<b>RC</b>	24 VAC Power for cooling, switched side	<b>RC</b>	24 VAC Power for cooling, switched side
<b>SC</b>	Sensor Common	<b>SC</b>	Sensor Common
<b>S1</b>	Indoor Remote Sensor	<b>S1</b>	Indoor Remote Sensor
<b>S2</b>	Occupancy Sensor	<b>S2</b>	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
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) and Emergency (Em) 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) 11 = 3 Heat/ 2 Cool heat pump (with auxiliary heat) and Emergency (Em) 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 <u>lowest</u> 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 <u>NOT</u> 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	0 = Disable 1 = Programmable Fan: Fan operates continuously in occupied periods or with demand in unoccupied periods. 2 = 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.