

HVAC CONTROLS

RESIDENTIAL PROGRAMMABLE THERMOSTAT T8600 SERIES CHRONOTHERM®IV

DESCRIPTION

The **T8600 Series** is a seven-day programmable, H/C thermostat for Proportional plus Integral (PI) control of standard or heat pump residential air handler applications. Controls are provided for both fan and system switching. This thermostat may be configured for °F or °C display with push-button set point adjustment and optional OSA temperature display. The fan switch offers auto/on control, and the system switch enables heat-off-cool-auto operation.

FEATURES

- Programmable seven-day set back control
- 1H/1C, 2H/2C, or heat pump models
- Simple keypad controls
- System and fan switches
- Temperature in °F or °C
- Digital backlit display
- Power-interrupt protection (no batteries)
- 12- or 24-hour clock
- Daylight savings button
- PI control
- Adaptive intelligent recovery (optimal start)
- Heat/Cool display indication
- Temporary hold temperature button
- White or taupe color



Honeywell



- Adjustable deadband
- Adjustable set point limits
- Adjustable display offset
- Adjustable cycle time

HVAC CONTROLS

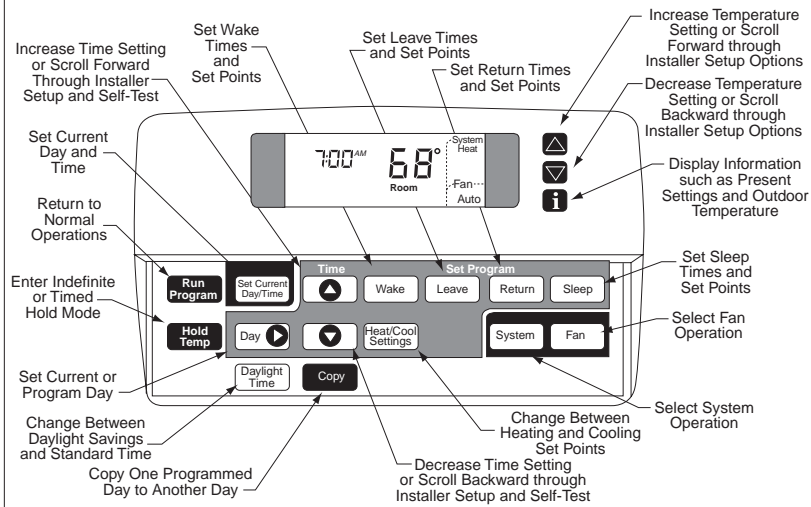
SPECIFICATIONS	
Power	24 VAC ±15%, 6 VA, 50/60 Hz
Power fail	Permanent program retention, 30 min. time and day retention
Output	24 VAC for heat/cool/fan
Switching	Fan 0.5A, heat/cool 1.5A
Ambient	40° to 110°F (4° to 43°C) 5% to 90% RH noncondensing
Enclosure	Taupe or white color, IP30, plastic
Temp display	LCD 0.44" (1.1 cm), ±1°F (0.5°C)
Wiring	Terminals for 18-AWG wire
Wall mounting	Direct or horizontal 2 x 4 box
Clock	12 or 24 hour, ±1 min./month
System switch	Keypad H/O/C/Auto
Fan switch	Keypad on/auto
Set point	Adjustable with buttons
Cooling	45° to 99°F (7° to 37°C)
Heating	40° to 90°F (4° to 31°C)
Control	Proportional + Integral (PI)
Differential	1°F (0.55°C)
Dead band	Adjustable 3° to 10°F (1° to 5°C), 3°F factory setting
Min off time	Adjustable 0, 1, 2, 3, 4, 5 min., 5 min. factory setting
Dimensions	3.75"H x 6.1"W x 1.56"D (8.9 x 15.4 x 40 cm)
Weight	0.85 lb (0.38 kg)



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THERMOSTAT DISPLAY / PROGRAMMING KEYS



WIRING

Thermostat	Terminal Connection
T8600	No parenthesis
(T8611G)	()
[T8624D]	[]
{T8611M}	{ }
N/C No Connection	
↔ Factory Jumper	

(X1)	(C)	(X2)	{OT}	{OT}	(L)
[N/C]	[C]	[N/C]	{OT}	{OT}	[B]
(X1)	(C)	(L)	(X2)	(OT)	(N/C)
N/C	N/C	N/C	N/C	N/C	OT
1	2	3	4	5	6
7	8	9			
10	11	12	13	14	15
16	17	18			
O	G	N/C	B	N/C	Y
W	RC	↔ R			
(R)	(N/C)	(W2)	(E)	(W1)↔(Y)	(O/B)
[R]↔[RC]	[W2]	[Y2]	[W1]	[Y1]	[O]
{R}	{N/C}	{W3}	{E}	{Y2}	{Y1}
					{O/B}
					{G}

Subbase Terminations

TERMINAL DESIGNATIONS AND DESCRIPTIONS

Terminal Designation	Typical Connection	Terminal Designation	Typical Connection
B	Heat damper motor, changeover valve	R	24 VAC system or heat transformer
C	Common connection	RC	24 VAC cooling transformer
E	Emergency heat	W, W1	First-stage heating
G	Fan relay	W2	Second-stage heating
L	LED light	X1, X2	LED lights
O	Cooling damper motor, changeover valve	Y, Y1	First-stage cooling
OT, OT	Outside air sensor termination	Y2	Second-stage cooling

INSTALLATION / MOUNTING

The base plate is mounted directly to the wall or 2 x 4 horizontal back box. Use 18-AWG wire and terminate as shown above. Then, top hook and snap down the thermostat electronics. No leveling is required.

PERFORMANCE CHARTS

The thermostat control uses the set point as displayed for PI control of heating and cooling and an adjustable deadband between the set points. The fan is controlled by demand for H/C, programmable or continuous, via the soft selector key, and displayed on the LCD. System control is selectable for heat, cool, off, or automatic, which engages the H/C automatically if mechanical heating or cooling is needed and is displayed on the LCD.

ORDERING INFORMATION

MODEL	DESCRIPTION
T8600D2028*	1H/1C Conventional, Fan (auto/on), System (heat-off-cool-automatic), Taupe
T8600D2069	1H/1C Conventional, Fan (auto/on), System (heat-off-cool-automatic), White
T8624D2004*	2H/2C Conventional, Fan (auto/on), System (heat-off-cool-automatic), Taupe
T8624D2012	2H/2C Conventional, Fan (auto/on), System (heat-off-cool-automatic), White
T8611G2002*	2H/1C Heat pump, Fan (auto/on), System (heat-off-cool-automatic), Taupe
T8611G2028	2H/1C Heat pump, Fan (auto/on), System (heat-off-cool-automatic), White
T8611M2025	3H/2C Heat pump, Fan (auto/on), System (heat-off-cool-automatic), White

* Normally stocked item

RELATED PRODUCTS

C7089B1000	OSA sensor
207396A	Replacement door, taupe
207396B	Replacement door, white