

Honeywell TH6220U2000 thermostat wiring for gas units HD/HDB, HDS/HDC, PTS/BTS, PTP/BTP, PTC/BTC, PDP/BDP, and duct furnaces “D”, “H”, “I”, & “O” series

! WARNING

1. Disconnect power supply before making wiring connections to prevent electrical shock and equipment damage.
2. All units must be wired strictly in accordance with wiring diagram furnished with the unit. Any wiring different from the wiring diagram could result in a hazard to persons and property.
3. All wiring must be done with a wiring material having a temperature rating of at least 105°C.



IMPORTANT

1. The use of this manual is specifically intended for a qualified installation and service agency. All installation and service of these kits must be performed by a qualified installation and service agency.
2. These instructions must also be used in conjunction with the Installation and Service Manual that originally shipped with the appliance, in addition to any other accompanying component supplier literature.

Wiring Diagram Selection

- For gas fired unit heaters and duct furnaces (non-factory supplied blower) with model numbers shown above, refer to Figure 1.1 and Table 1.1 for correct unit to thermostat wiring.
- For all other system units (factory supplied blower), refer to the job specific unit wiring diagram provided with the unit.
- For deviations to these wiring diagrams or the job specific wiring diagrams, consult the factory.

Installation and Wiring

Installation of wiring must conform with local building codes, or in the absence of local codes of the National Electric Code ANSI/NFPA 70 - Latest Edition. Unit must be electrically grounded in conformance to this code. In Canada, wiring must comply with CSA C22.1, Part 1, Electrical Code.

Figure 1.1 - Terminals on Thermostat

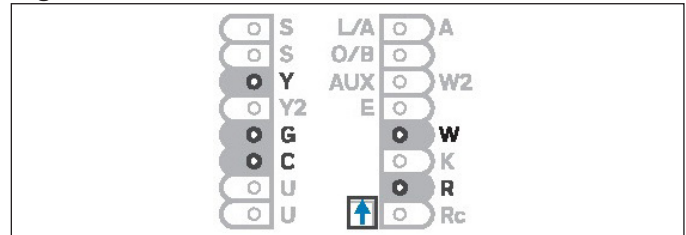


Table 1.1 - Thermostat to Unit Wiring

Model	↓ Wiring Terminals on Thermostat ↓ ①					Location of Unit Terminals	↓ Wiring Terminals on Unit ↓ ①
	W2 (2-stage ONLY)	G	W	C	R ②		
HD/HDB, HDS/HDC, PTS/BTS, PTP/BTP	W2	G	W1	C	R	Ignition control in unit control compartment	
PTC,BTC	n/a	G ③	T2	F	T1	Terminal board on external junction box	
PDP/BDP	Gas valve high stage (HI, 3, or A)	F ④	T2	G	T1	Terminal board on external junction box	
DFG, IFG, DFP, IFP	Gas valve high stage (HI, 3, or A)	Fan relay by others or to factory relay wire removed from T or H	T	G	H	Terminal board on external junction box (Digit 13=4 Only)	
DFG, IFG, DFP, IFP, DFS, IFS, HFG, OFG, HFP, OFP	3	Factory time delay relay wire removed from 4	4	2	1	Terminal strip in control compartment (Digit 13=0, 1, 2, or 3)	

① Not all terminal connections are used. Table only shows terminals that are used for required heating operation.

② The factory installed R to Rc terminal wire jumper is to remain in place.

③ Verify that the buss bar on the G terminal is removed.

④ Verify that the buss bar between the T2 and F terminal is removed.

Thermostat Function Program Selection

- To enter thermostat setup mode, press and hold the hold the **CENTER** and "+" buttons for approximately 3 seconds to enter advanced menu.
- Press **Select** to enter **ISU**.
- Press **Select** to cycle through menu setup options.
- Press "+" or "-" buttons to change values or select from available options.
- Press **Select** and confirm your settings or press **Back** to ignore changes and return to ISU menu screen to continue editing another setup.
- To finish setup process and save your setting, press Home and return to Home screen.
- For gas fired unit heaters and duct furnaces (non-factory supplied blower) with model numbers shown on the opposite side, refer to Table 2.1 typical thermostat function settings.
- For all other system units (factory supplied blower), refer to the job specific unit wiring diagram provided with the unit.
- For deviations to these wiring diagrams or the job specific wiring diagrams, consult the factory.
- For additional information, refer to the vendor literature supplied with the thermostat.

Figure 2.1 - Buttons to Press to Enter Function Programming Mode

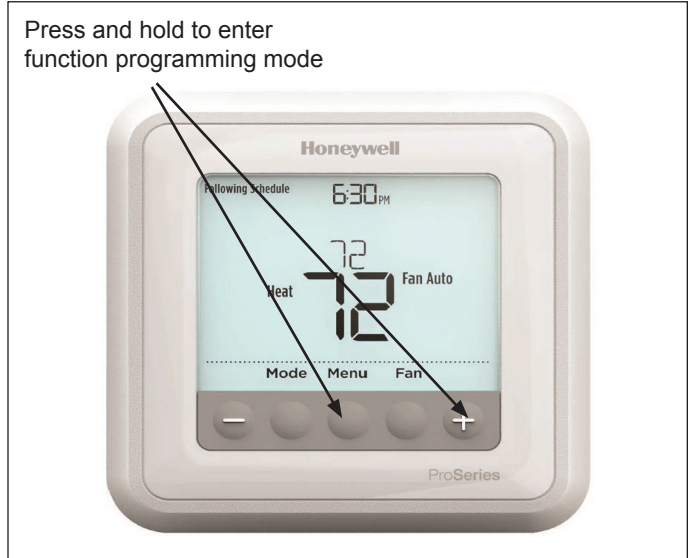


Table 2.1 - Typical Thermostat Function Program Settings ①

Function Number	Feature	Typical Setting	Description
120	Scheduling Options	①	①
125	Temperature Indication Scale	0	Fahrenheit
		1	Celcius
205	Heating Equipment Type	1	For gas or oil furnaces of less than 90% efficiency
		2	For furnaces of over 90% efficiency
220	Cool Stages / Compressor Stages	①	①
230	Fan control	1	Gas or oil furnace — equipment controls fan in heating
256	Emergency Heat Sources	①	①
370-371	heat cycle rate (CPH)	①	①
431	Heat temperature range stops	90	Default value, can be set 40-90 in increments of 1°F
		80	For PTC models, this setting must be changed to 80
430	Cool temperature range stops	50	①

① See Honeywell instructions that shipped with stat for more information and additional setting options.