



Installation Manual

GT110D / GTV110D / GT211D

Non-programmable Thermostats

GT110D thermostat



GTV110D thermostat



GT211D thermostat



For the following system types

GT110D and GTV110D:

- Central heating (gas, oil, electric or high-efficiency furnace)
- Central heating (see above) with air conditioning
- Hot water system (steam or gravity) with or without pump
- Central air conditioners
- 750 mV heating systems
- 1-Heat/1-Cool heat pumps

GT211D:

- 2-Heat/1-Cool heat pumps

Must be installed by a trained, experienced technician

Read these instructions carefully. Failure to follow these instructions can damage the product or cause a hazardous condition.



69-2107ES

Wallplate installation



CAUTION: ELECTRICAL HAZARD

Can cause electrical shock or equipment damage. Disconnect power before beginning installation.

- 1 Loosen the locking screw at the bottom of the thermostat. Note that the screw is captive and cannot be removed from the wallplate.
- 2 Separate the thermostat from the wallplate as per Figure 1.
- 3 Position the wallplate against the wall and mark hole positions with a pencil.
NOTE: Levelling is for aesthetics only and will not affect the performance of the thermostat.
- 4 Drill holes at the marked positions and insert supplied wall anchors.
- 5 Pass the wires through the large opening located at the bottom center of the wallplate as per Figure 2.
- 6 Secure the wallplate to the wall with supplied mounting screws as per Figure 3.
- 7 Connect the wires to the terminals.

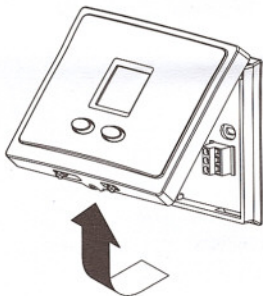


Figure 1

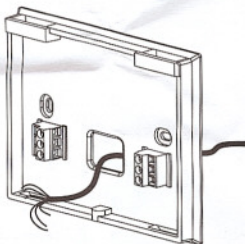


Figure 2

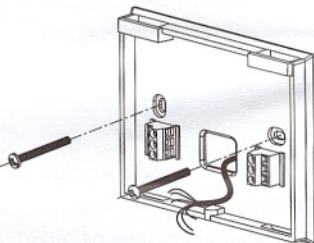


Figure 3

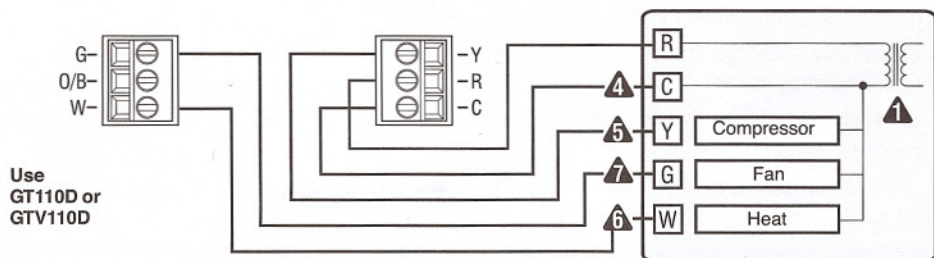


MERCURY NOTICE

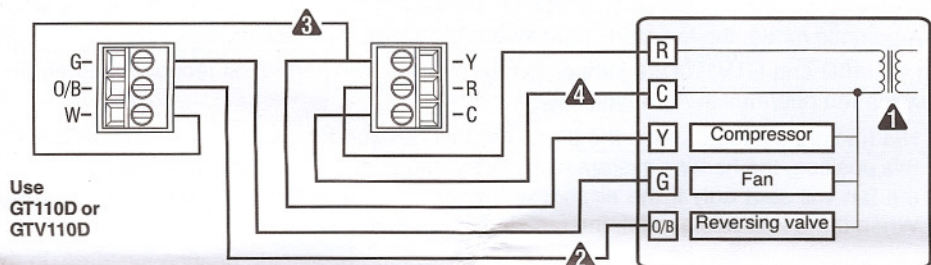
If this product is replacing a control that contains mercury in a sealed tube, do not place the old control in the trash. Contact your local waste management authority for instructions regarding recycling and proper disposal.

Wiring

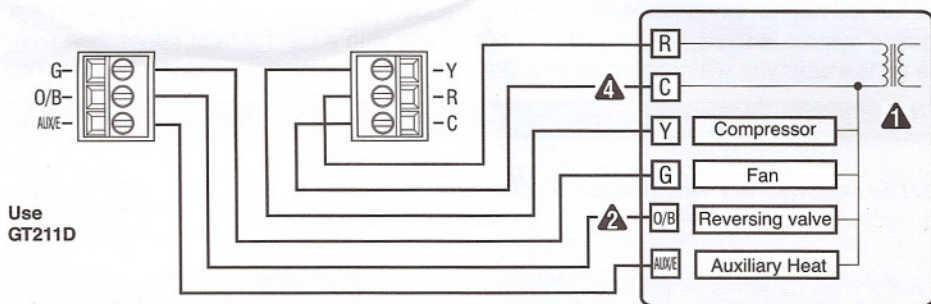
Gas, oil or electric heating and/or air conditioning (1H / 1C / 1H1C)



Heat pump without auxiliary heating (1H1C)



Heat pump with auxiliary heating (2H1C)



- 1 Power supply. Provide disconnect means and overload protection as required.
- 2 Set the O/B jumper according to the type of reversing valve (see page 4).
- 3 Use a piece of wire (not supplied) to connect W and Y terminals to each other.
- 4 Optional 24 VAC common connection. If this connection is not made, use batteries to power the thermostat.
- 5 This connection is not required for systems that provide heating only
- 6 This connection is not required for systems that provide cooling only
- 7 This connection is not required for systems that do have an air recirculating fan.

Reversing valve setting

NOTE: This setting is necessary only if the thermostat is connected to a heat pump.

The jumper is located on the back of the thermostat faceplate. Set it according to the type of reversing (changeover) valve used by the heat pump.

- **O** (factory setting): The reversing valve is energized when the System switch is set to Cool (cooling mode).
- **B:** The reversing valve is energized when the System switch is set to Heat (heating mode).

Incorrect jumper setting: The heat pump operation will be reversed; i.e., it will cool in Heat mode and will heat in Cool mode.

Fan operation setting

NOTE: This setting is relevant only if you connect a fan to the G terminal.

The jumper is not available on GT211D. On the GT211D thermostat, when the fan is placed in Automatic mode, the fan starts right away when there is a call for heat or cool.

On GT110D and GTV110D, a jumper, on the back of the thermostat faceplate, determines how the fan operates in Automatic mode.

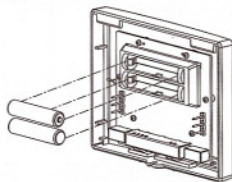
- **HG** (factory setting): Leave the jumper in this position for gas or oil heating systems. In this position, the heating system controls the fan operation. When there is a call for heat, the fan will start only if the air that will be coming out of the vents is sufficiently warm. When there is a call for cool, the fan starts right away.
- **HE:** Place the jumper to this position for heat pump or electric heating systems. In this position, the fan starts as soon as there is a call for heat or cool.

Incorrect jumper setting: If the jumper is at **HG** when an electric heating system is used, the fan will not run when placed in Automatic mode. If the jumper is set to **HE** when a gas heating system is used, the fan will start right away with a call for heat rather than wait till the air is warm; you will notice cool air initially coming from the vents during a call for heat.

Battery installation

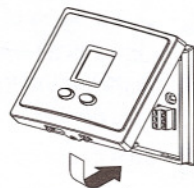
NOTE: Batteries are **not** needed if 24 VAC common wire is connected to the C terminal.

Install 2 AAA batteries on the back of the thermostat faceplate as shown.



Thermostat mounting

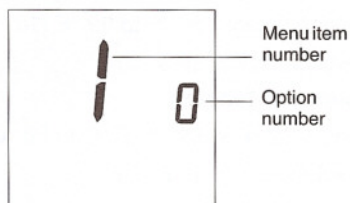
- 1 Align the two brackets on the top of the thermostat with the corresponding slots on the top of the wallplate.
- 2 Push the faceplate against the wallplate.
- 3 Tighten the screw at the bottom of the thermostat.



Installer setup

Follow the procedure below to personalize the thermostat and configure it according to the heating/cooling system.

- ① Press ▲ and ▼ for three seconds. The display will appear as shown on the right.
- ② Press ▲ or ▼ to change the option.
- ③ Press ▲ and ▼ for one second to advance to the next menu item.
- ④ Press ▲ and ▼ for three seconds while the last menu item (item number 5) is displayed to save any changes and exit the setup menu.



NOTE: If you do not press any button for 60 seconds while you are in the setup menu, the thermostat automatically saves any changes made and exits the menu.

Menu item	Default setting	Options
1 Temperature display format	0	0: Fahrenheit 1: Celsius
2 Heating cycle rate	5	1 to 6 cycles per hour • 1: 60 min • 2: 30 min (steam, gravity) • 3: 20 min (hot water, 90%+ high-efficiency furnace) • 4: 15 min (gas or oil) • 5: 12 min (gas or oil) • 6: 10 min (electric)
3 Cooling cycle rate	3	1 to 6 cycles per hour
4 System type ¹	0	0: Conventional 1: Heat pump
5 Compressor protection ²	1	0: Off 1: On

¹ Not shown on GT211D. The GT211D thermostat is for heat pump only.

² The compressor can be damaged if it is restarted too early after it has stopped. This function ensures a minimum 5-minute idle period. If there is a demand for heat (in heat pump applications only) or cool during that period, the message **Heat On** or **Cool On** will flash on the screen respectively. After the idle period is over, the message stays solid and the compressor starts.

Specifications

Temperature Setpoint

- Heating Range: 40 °F to 90 °F (4.5 °C to 32 °C)
- Cooling Range: 50 °F to 99 °F (10 °C to 37 °C)
- Resolution: 1 °F (0.5 °C)

Temperature Display

- Range: 32 °F to 99 °F (0 °C to 50 °C)
- Resolution: 1 °F (0.5 °C)

Operating Temperature

- 32 °F to 122 °F (0 °C to 50 °C)

Shipping Temperature

- -40 °F to 130 °F (-40 °C to 55 °C)

Operating Relative Humidity

- 5% to 90% (non-condensing)

Physical Dimensions

- GT110D: 3.7" H x 4.7" W x 1.0" D (94 mm H x 120 mm W x 25 mm D)
- GTV110D: 4.7" H x 3.5" W x 1.0" D (120 mm H x 89 mm W x 27 mm D)
- GT211D: 3.7" H x 4.7" W x 1.0" D (94 mm H x 120 mm W x 25 mm D)

Power Supply

- 24 VAC or 2 AAA batteries

Maximum Load

- 1 A @ 24 VAC per output