

Older systems and base signals on newer ones

Terminal	Probable wire Color	Signal	Description
C	Black	24 Vac Common	From one side of the 24Vac transformer (Think of this as 24Vac neutral)
R or V	Red	24 Vac Power to be switched	From other side of the 24Vac transformer (Think of this as 24Vac L1)
Rh or 4	Red	24 Vac Heat call switch power	Same as R, but dedicated to the Heat call switch
Rc	Red	24 Vac Cooling call switch power	Same as R, but dedicated to the cooling call switch
G	Green	Fan	Fan switch on thermostat - is connected to R when Fan /Auto switch is in the fan position
W	White	Heating call	Is connected to R or Rh when thermostat calls for heat. (Might be jumpered to Y on a heat pump. On others might be second stage heating)
Y	Yellow	Cooling call	Is connected to R or Rc when thermostat calls for cooling. Also Cooling or 1 st stage heating on a heat pump Most often connected to G when Fan switch is set to auto

New signals - for heat pumps and staged systems

Terminal	Probable wire Color	Signal	Description
Y2	Blue or Orange	2 nd stage Cooling	
W2	Varies	Second Stage Heating	First stage Auxiliary heating on a heat Pump
E	Varies, blue, pink, gray, tan	Emergency heat relay on a heat pump. Active all the time when selected, usually not used.	Disable the heat pump and turn on first stage Aux heating
O	Varies, Orange	Reversing valve	Energize to cool (Changes from heat to cool on heat pumps)
B	Varies, blue, black	Sometimes common side of transformer. Needed on some	Might be heating changeover or on older stuff common of transformer.

	brown, orange	electronic thermostats or if you have indicator lamps OR Reversing valve (energize to heat) above. York and Trane sometimes use (B) as common.	
X	Varies	SEE NOTES BELOW	Might be common but sometimes emergency heat relay
X2	Varies	Second stage heating or indicator lights on some thermostats	Might be emergency heat relay
T	Varies, Tan or Gray	Outdoor anticipator reset	Used on GE/Trane/American Standard and some Carrier Products.
L	Varies	Service Light	