

Installation Guide

TCM1 Thermostat Control Module

Caution

Failure to follow these instructions can damage the product or cause a hazardous condition. Disconnect power during the installation of this product. All wiring must conform to local codes and ordinances. This device is designed for use with 24 VAC systems.

For additional assistance visit www.PelicanWireless.com to request support.

Before Removing Old Thermostat

Note the colors and letter designations of the terminal connections on the existing thermostat to assist in identifying the correct wiring connections.

Mounting

The Thermostat Control Module is generally mounted close to or inside the HVAC unit it will be controlling. If the device will be mounted inside the HVAC unit, it must be positioned so that it's wireless signal is not obstructed by metal surfaces or enclosures. Plastic cases or grills will not interfere with wireless signals, therefore the best internal mounting location is directly behind the HVAC unit's plastic case.

Two included permanent double stick tape squares should be used to mount the Thermostat Control Module to a flat surface.

System Type

The system type (Conventional or Heat Pump) is set using the three position switch on the Thermostat Control Module. Switch positions are labeled on the front of the device. The system type should be set before applying power the the unit.

Terminal Designations

Conventional

R	24 VAC Power for Heat		
Rc	24 VAC Power for Cool		
С	Common 24 VAC from Heat Transformer		
Υ	Cool Control – stage 1		
W	Heat Control – stage 1		
G	Fan Control		
W2	Heat Control – stage 2		
Y2	Cool Control – stage 2		

Heat Pump

R	24 VAC Power for Heat		
Rc	Jumper to Terminal "R"		
С	Common 24 VAC from Transformer		
Υ	Compressor		
O/B	Reversing Valve		
G	Fan Control		
Aux	Auxiliary/Emergency Heat		
G2	Fan – High Speed		

Note: Remove jumper between R & Rc for two Transformer systems.

Standard Wire Colors

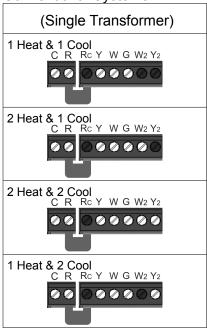
Most thermostat installations follow standard wire color designations. This should be verified for your installation. These standard colors are:

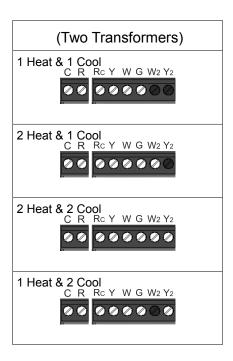
Terminal	Color	Description
R, Rc	Red	24 VAC Power
W	White	Heat Control
G	Green	Fan Control
Υ	Yellow	Cool Control
С	Black	24 VAC Common
Y2	Blue or Orange	Cool Control - Stage 2
W2	Varies	Heat Control – Stage 2
Aux	Varies, blue, pink, gray, tan	Auxiliary or Emergency Heat
О/В	Varies, Orange	Reversing Value

Wiring Guide

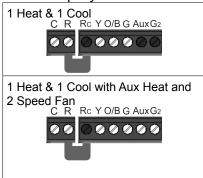
The follow wire connection guide should be used for your installation. This guide shows the most common configurations. Contact Pelican Wireless Systems for assistance with configurations not shown on this guide.

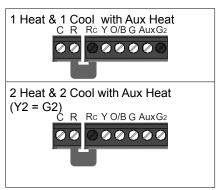
Conventional Systems





Heat Pump Systems





Configuration

All of the configuration settings can be made through the Pelican Site Manager Web Application. These can be found under the *Admin* section. Each Thermostat Control Module will be listed with it's serial number and the label *Thermostat Setup*. Most configuration items can be left at their default setting. For proper operation it is necessary to set the correct System Type (Conventional or Heat Pump). See the "System Type" section above.