



Zoning

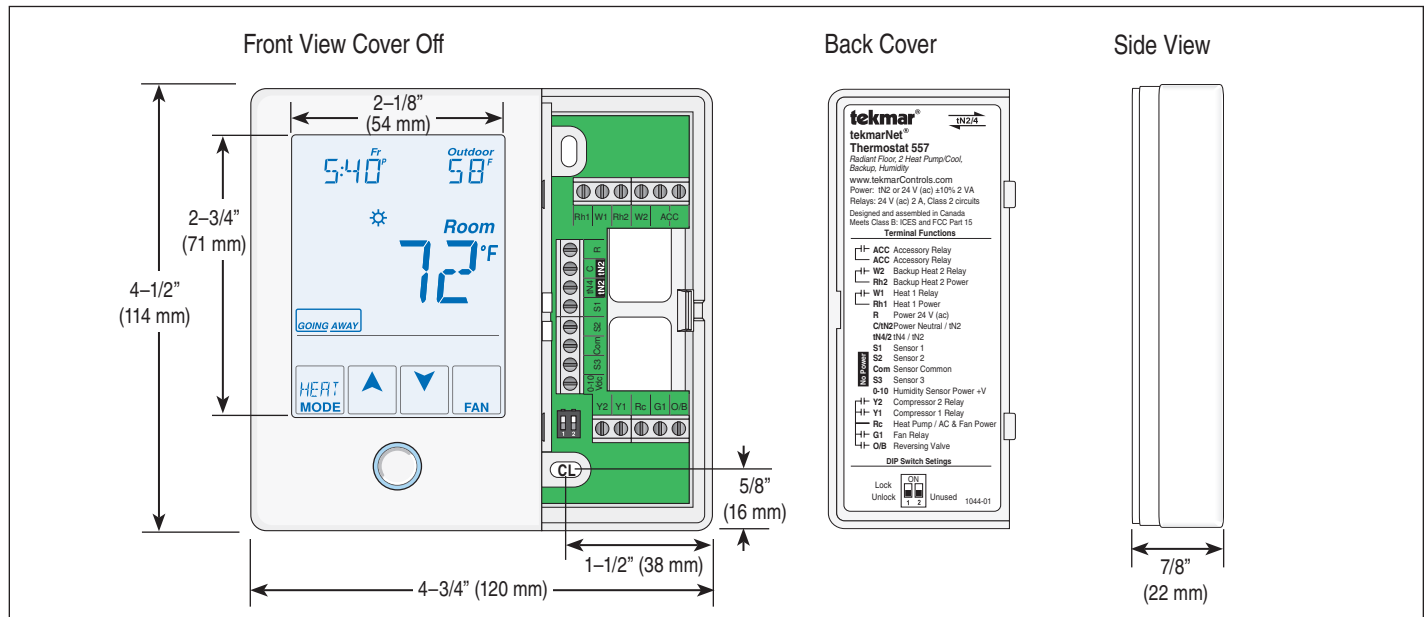
557_C

08/12

Replaces: New

Job _____ Designer _____ Contact _____

The tekmarNet® Thermostat 557 is a communicating touchscreen thermostat designed to operate either a) a hydronic radiant floor with a two stage heat pump (water-to-air or air-to-air) for heating and cooling and an emergency backup heating system; or b) two stages of heating and two stages of cooling. There are three auxiliary sensor inputs that can be used to measure room, floor, outdoor, or duct temperature. The optional floor sensor allows precise heating of radiant floors. Relative humidity level can be measured and controlled using either the built-in or external humidity sensor. The large touchscreen display allows you to easily adjust 7-day programmable schedules and room temperatures to optimize comfort and energy savings. The 557 can connect to tekmarNet® controls using two or four wires or it can be installed as a stand-alone device.



Specifications

tekmarNet® Thermostat 557 Radiant Floor, 2 Heat Pump/Cool, Backup, Humidity	
Literature	557_A, 557_C, 557_D, 557_Q, 557_U
Control	Microprocessor control. This is not a safety (limit) control
Packaged weight	0.9 lb. (400 g)
Dimensions	4-1/2" H x 4-3/4" W x 7/8" D (114 x 120 x 22 mm)
Enclosure	White PVC plastic, NEMA type 1
Approvals	Meets Class B: ICES & FCC Part 15
Ambient conditions	Indoor use only, 32 to 122°F (0 to 50°C), RH ≤90% non-condensing
Environmental	Compatible with chlorinated swimming pool environments. Not compatible with ammonia (animal barns), methanol, ethanol, acetone.
Power supply	24 V ±10%, 60 Hz, 2.0 VA standby, NEC / CEC Class 2
Relays	24 V (ac) 2 A
0-10 Vdc terminal	3.3 V (dc) for humidity sensor power, 3.0 mA max
Humidity sensor	0 to 90% ± 3% RH
Temperature sensor	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892
-Included	None
-Optional	tekmar type # 070, 072, 073, 076, 077, 079, 083, 084, 086
Warranty	Limited 3 Year (See 557_D for full warranty)

Energy Saving Features

- Programmable Schedule
- Zone Synchronization
- Zone Post Purge
- Warm Weather Shut Down
- Cooling Interlock
- Auto Heating Cycle
- Temporary Hold
- Away Scene Key

Additional Features

- 3 Auxiliary Sensor Inputs
- tekmarNet® Communication Compatible
- Touchscreen Technology
- Outdoor & Floor Temperature Display
- Backlight
- Radiant Floor Heating & Cooling
- Freeze Protection
- Exercising
- Heat / Cool Priority
- Air Group Master
- Network Schedule Master or Member
- Optimum Start
- Scenes
- Daylight Savings Time
- Room Temperature Limiting
- Relative Humidity Control

SPECIAL REQUIREMENTS

This thermostat is designed to be used with a tekmarNet® House Control, Wiring Center or Zone Manager for power and communication. It can also be used in stand alone applications.

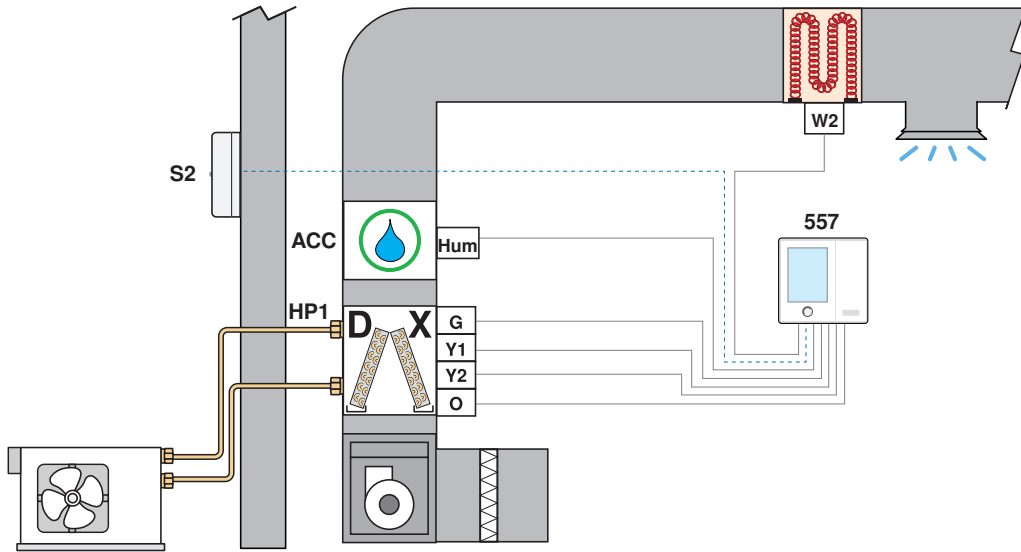
Sample Application Drawing

Below is a sample application drawing for this product. This application may include other tekmar products that are required for installation. More sample applications can be found at www.tekmarControls.com.

Sample Mechanical diagram

Legend

ACC = Humidifier
 HP1 = Air to Air Heat Pump
 S2 = Outdoor Sensor 070



Sample Electrical diagram

