

# AZEL TECHNOLOGIES INC.

## Universal Multi-Display Radiant Floor Heating Thermostat D-508F

NEW



Actual Size

Three Modes of Operation:  
Air/Floor/Air with Floor limits

**Eco-Friendly**



[www.azeltec.com](http://www.azeltec.com)

# D-508F UNIVERSAL MULTI-DISPLAY RADIANT FLOOR HEATING THERMOSTAT

D-508F digital non-programmable heat only thermostat is designed to control either ambient(air) temperature (A Mode) or floor temperature (F Mode) or a combination of ambient temperature with floor temperature limits(AF Mode). An auxiliary remote sensor is provided to measure slab temperature in order to control the floor temperature(within maximum and minimum limits in AF Mode). It can also be used for sensing the outdoor temperature in A Mode.

## FEATURES:

- Easy-to-Read Digital Multi-Display with backlit which provides constant readout of two sensor temperatures(eg. ambient and floor) and setpoint simultaneously, functional status and control settings.
- Three temperature control modes:  
A Mode: controls ambient temperature  
F Mode: controls floor temperature. Also displays current ambient temperature.  
AF Mode: controls the ambient temperature and maintains the floor temperature within the desired minimum limit for floor warming and maximum limit for protecting floor coverings. Also, displays current floor temperature.
- QuickSet feature allows instant setpoint adjustment without entering the SETTING mode
- Contemporary design
- Easy installation and setup
- Selectable display in °F or °C
- On/Off switch to shut off relay output or shutdown the thermostat at end of heating season for added security
- EEPROM memory retains control settings in the event of a power failure
- Lockout mode to prevent tempering by unauthorized personnel
- Sensor failure and out of range indications
- One stage heating application
- Backlit option: Auto (60 sec.)/OFF/ON
- Supplied with P-01 floor sensor
- Battery free
- RoHS(Restriction of Hazardous Substances) compliant means this thermostat is Eco- friendly

## UNIVERSAL SENSOR PROBE (THERMISTOR)



Model: P-01

The Azel Sensor Probe is engineered to ensure long life and rapid response. It is designed to strap on a pipe or insert into a temperature well. P-01 is specially designed for use with D-508F thermostats and other controls that require 10K ohm thermistors.

## SPECIFICATIONS:

- Sheath: Copper
- Lead: 10" of 20 AWG heat resistance wire
- Dimension: 3/8" OD x 13/16" length
- Operating range: -60 to 255°F (-50 to 125°C)
- Sensor: 10K ohm @ 77°F (25°C ± 1%) thermistor

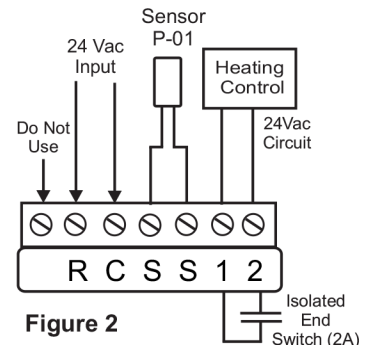
## SPECIFICATIONS:

- Display Format: Liquid Crystal Display(LCD) with backlit
- Power Input : 24VAC ±10%, 50/60Hz, 0.5VA
- Contact Rating: 2A 24VAC
- Selectable display in °F or °C
- Setpoint Range (ambient): 34-100°F(1-38°C). Default setting: 70°F (21°C)
- Floor Temperature Control Range: 34-122°F(1-50°C)  
Default setting: 82°F (28°C)
- Maximum Floor Temperature Limit(AF Mode): 35-122°F(2-50°C)  
Default: 82°F(28°C)
- Minimum Floor Temperature Limit(AF Mode): 34-121°F(1-49°C)  
Default: 40°F(5°C)
- Temperature Display Range: -22 to 131°F(-30 to 55°C)
- Switching Differential: A/F/AF Mode: 0.5/1.0/1.5/2°F(°C), Default: 1°F/1°C
- Sensor Probe: P-01 10kΩ thermistors, 10" lead, 3/8"(9.5mm) OD x 13/16"(20.6mm) length
- Operating Temperature: 32 - 122°F (0 - 50°C)
- Dimension: 3.62"W x 2.99"H x 0.91"D(92 x 76 x 23mm)
- Weight: 0.32 lb. (145 g)
- Storage: -4 to 120°F (-20 to 50°C)
- Material: Flame retardant plastic

## WIRING DIAGRAM

### Terminals Representation:

- R: 24VAC Hot
- C: 24 VAC Common
- S, S: auxiliary remote sensor(P-01)
- 1, 2: relay switch output



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