



ZTS-D2 Room Temperature Sensor w/LCD Display, Push Button Override, Setpoint Adjustment and Fan Speed Select Switch

The ZTS-D2 is a low power, high accuracy, 3.5 digit LCD display unit. The ZTS-D2 is a wall mount room unit that includes a 10k thermistor for room temperature sensing and a 10k potentiometer for setpoint. The override switch is a normally open switch in parallel with the room temperature sensor. It also has a 4 position select switch for fan speed control. The ZTS-D2 may be powered with either 24 VAC or +8 to 35 VDC, since it uses a half-wave bridge to convert the AC voltage to a useable DC voltage. The heart of the ZTS-D2 temperature reference is a precision, semiconductor type, temperature sensor calibrated to +/- 0.2F accuracy. The +/- 0.2F high accuracy unit is calibrated to an NIST Traceable thermometer.

All of the units come with a two year factory warranty.

Specifications

Input: 2-wire external power & 4 wires (temp, setpoint, fan switch, COM)
Supply Voltage: +8 to 35VDC or 24VAC
Current Draw: Less than 4mA
Life Expectancy: 100,000 hours or 11.5 years
Display Accuracy: +/- 0.2 degrees F
Display Operating Temperature: 32 to 158 F (0 to 70 C)
Enclosure Material: Beige ABS plastic
Fan Switch Resistance Values: 12k@High, 10.5k@Med, 8.5k@Low and 6.5k@Off

Wiring Connections

8 wires must be pulled for the ZTS-D2 to work properly. The supply voltage to the display must be isolated from the sensor inputs to the controller. Solidyne recommends the use of 18 to 22 AWG twisted pair wires or shielded cable for all sensor installations.

Mounting Instructions

The ZTS-D2 is shipped as a two-piece unit. The LCD Module must be unplugged from the 10 pin connector before the base of the sensor may be mounted to either the drywall or over a standard 2" x 4" Junction Box, using the mounting hardware provided. The LCD Module should then be gently inserted back into the 10 pin connector. The cover may now be placed onto the unit and tightened down using the (2) 1/16" Allen screws at the bottom of the housing.

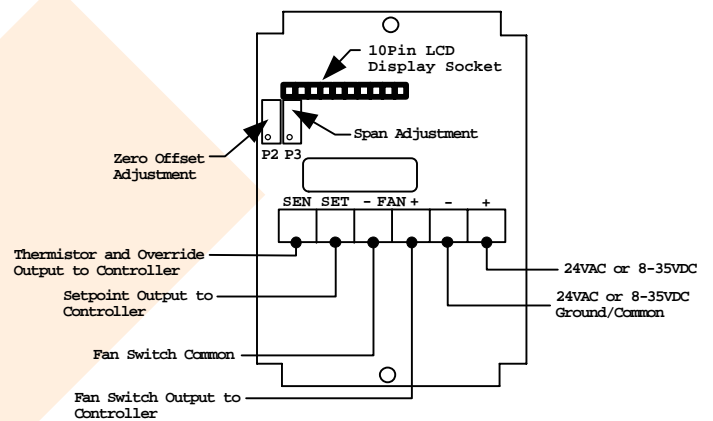
Temperature Display Adjustments

The temperature display may be adjusted by adjusting the ZERO or OFFSET Potentiometer (P2) as shown on the wiring diagram below. Adjust (P2) until the LCD Display reading, matches your controllers temperature reading if necessary. All LCD Displays, are factory calibrated using an NIST Certified Glass thermometer.

Fan Speed Switch Configuration

When using the fan speed switch with a Solidyne IZAC or M2 family controller, the fan speed switch input should be selected for 10K F. This setting will show a value of ~69@High, ~75@Med, ~84@Low and ~94@Off

Wiring Diagram



Dimensions

