



SAMOD

Stand-Alone or Floating Zone Modulating Damper Control

SAMOD OVERVIEW

The system is designed for over-conditioned areas and prevents over-heating and over-cooling of individual or stand alone zones. The SAMOD is an auto changeover thermostat that communicates to a fully modulating round or rectangular damper or D-Fuser.

Auto changeover operation allows the SAMOD thermostat to change from a cooling to a heating thermostat automatically. A duct sensor is included and installed upstream of the damper to determine the temperature in the duct. If the SAMOD thermostat is calling for cooling and cool air is available in the duct the damper will modulate open. A heating call will close the damper. If the sensor determines warm air is available in the duct and the thermostat is calling for heat the damper will modulate open. The SAMOD system senses the duct temperature and compares it to the set point vs. room temperature providing warm or cool air as required. If the thermostat is not calling for heating or cooling the damper will modulate to 40% for ventilation.

The SAMOD allows you to effectively control problem areas by controlling the existing air supply to the problem room or zone. This versatile problem solver is also designed to control supplemental or auxiliary heating devices.



Zonex auto changeover thermostat is designed to control and modulate a stand alone diffuser or damper. Zonex offers 600 unique sizes of round and rectangular dampers for your commercial applications.

SAMOD FEATURES

- ◆ Auto Changeover 7-day Programmable
- ◆ Control Fully Modulating Dampers
- ◆ Display Duct Temp at the Stat
- ◆ Adjustable Aux or Reheat Operation
- ◆ F or C Temperature Operation
- ◆ Single Set Point for Easy End User Operation
- ◆ Set point lock
- ◆ Auto / Off switch
- ◆ Remote Sensor Capability
- ◆ Slave capability - up to 3 dampers per stat
- ◆ No Batteries Required
- ◆ Non-volatile Memory



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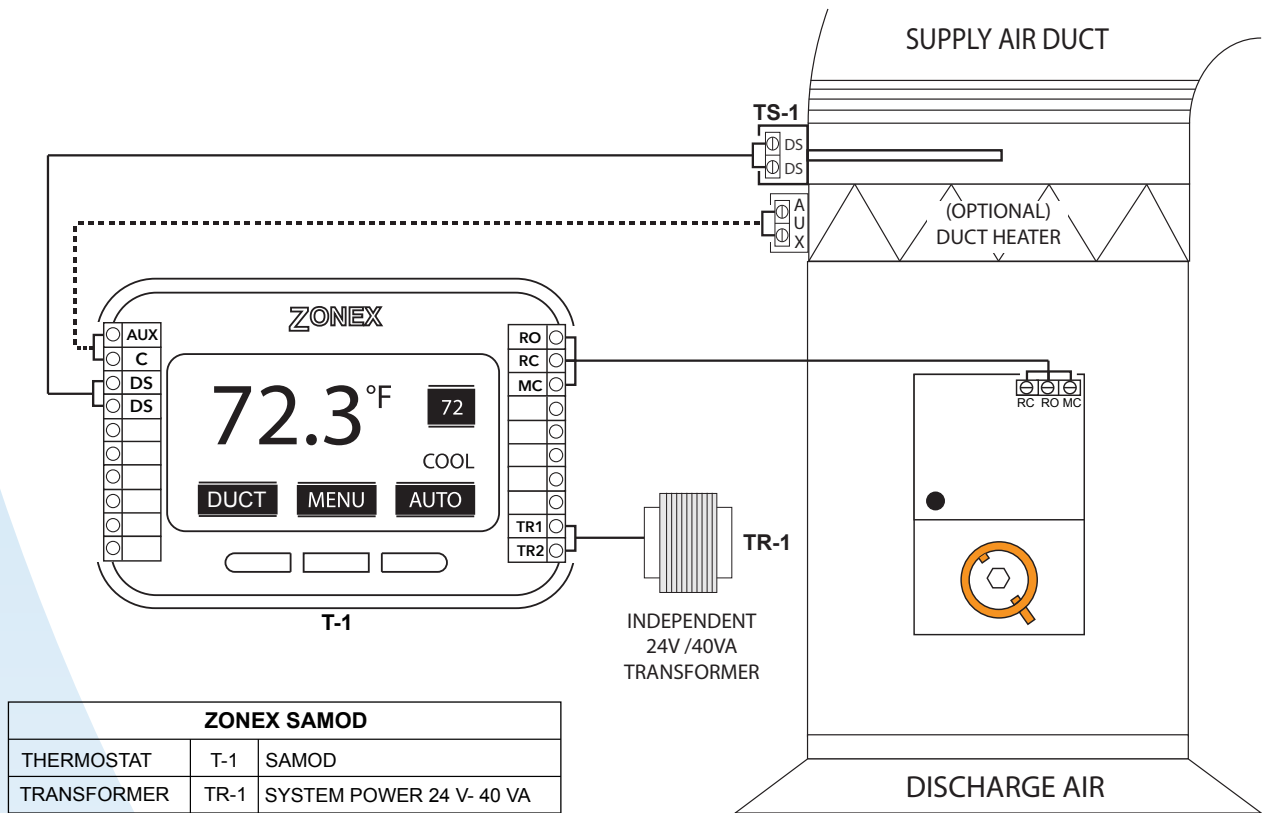
SAMOD solves the problem of over-heated and over-cooled rooms for your customers

WIRING INSTALLATION INSTRUCTION

INSTALLATION

1. Install the SAMOD thermostat in the zone on an interior wall away from direct sunlight, supply air currents, or any heat generating source.
2. Install ST series Round, Rectangular or D-FUSER Damper into the supply air duct.
3. Wire supply damper to SAMOD controller sub-base using three conductor 18 gauge thermostat wire.
4. Install a 24 volt, 40 VA transformer in accordance with local code requirements. From the transformer - run 18/2 wire and connect to SAMOD thermostat terminals TR1 and TR2.
5. Install Leaving Air Temperature Sensor (TS) in the ductwork prior to the supply damper and run sensor wires to the SAMOD. If wires need to be extended, 18 gauge thermostat wire may be used, not to exceed 100 ft. in length.
6. Duct Air Temperature (TS) sensor wires are connected to the DS terminals of the SAMOD thermostat.

***NOTE:** An air proving switch (field supplied) must be used for reheat applications. A field supplied relay may be required for VAV box applications.



ZONEX SAMOD		
THERMOSTAT	T-1	SAMOD
TRANSFORMER	TR-1	SYSTEM POWER 24 V- 40 VA
LAT SENSOR	TS-1	DUCT TEMPERATURE SENSOR
TERMINAL CONNECTIONS		
SAMOD CONTROLLER AND ACTUATOR		
TR-1	24 VAC POWER INPUT	
TR-2	24 VAC POWER COMMON	
RO	DAMPER RUN OPEN SIGNAL	
RC	DAMPER RUN CLOSED SIGNAL	
MC	24 VAC MOTOR COMMON	
DS	DUCT TEMPERATURE SENSOR	
AUX	OPTIONAL AUXILIARY HEAT	
C	AUXILIARY HEAT COMMON	

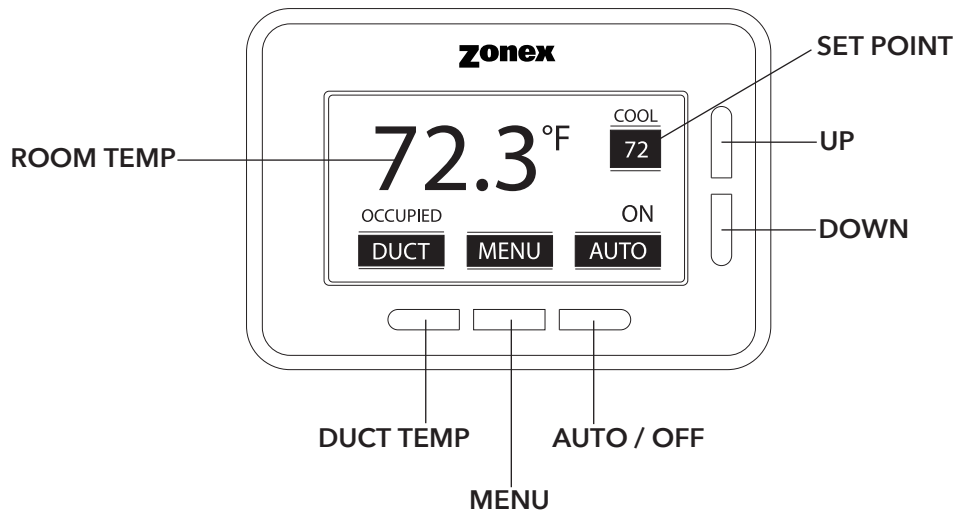
NOTES: PROVIDE MODULATING ZONEX ROUND OR RECTANGULAR DAMPER OR D-FUSER DESIGNED TO SUPPORT UP TO 1.75" S.P.

AUX CONTACTS USED TO CONTROL SUPPLEMENTAL HEAT SOURCE: I.E. BASEBOARD OR RADIANT PANEL IF ELECTRIC HEAT IS USED AN AIR PROVING SWITCH MUST BE INSTALLED

VISIT OUR ON-LINE CATALOG AT ZONEXPRODUCTS.COM

FOR APPLICATIONS ASSISTANCE CALL 800-228-2966

OPERATING INSTRUCTION



The SAMOD is an Auto Changeover thermostat that modulates a zone damper based on supply air and room temperature. System logic dictates system mode of operation. When duct temperature is 3 degrees or more below room displayed temperature on the SAMOD thermostat, the mode is set as Cool. When duct temperature is 7 degrees or greater than room temperature as displayed on SAMOD thermostat, then mode is set for Heat. If duct temperature is neither 3 degrees below nor 7 degrees above room temperature displayed on SAMOD thermostat, then mode is set for Vent for continuous air circulation.

OPERATION

Using the Up and Down button, select your required set point:

UP - Increases set point.

DOWN - Decreases set point.

Confirm "AUTO" icon appears above the third button on the thermostat to maintain zone comfort based on thermostat set point, room temperature and duct temperature.

FUNCTION BUTTONS

AUTO - Configures controller for AUTO mode or OFF mode (Hold Auto/Off for 15 seconds to turn SAMOD Off/On)

DUCT - Pressing this button displays supply air temperature

MENU - Accesses system configuration functions

DUCT TEMPERATURE

To check the duct temperature press "DUCT" and the current temperature in the duct will be displayed.

LOCKING SAMOD CONTROLLER

The SAMOD controller can be locked hiding MENU functions and preventing set point from being changed greater than 2 degrees above or below selected set point. To lock SAMOD controller, press and hold DUCT button for 10 seconds. To unlock, press DUCT button for 10 seconds; MENU will be visible and temperature set point can be changed.

CALIBRATION

Press MENU and AUTO buttons and scroll to CALIBRATE using the Up/Down buttons, when highlighted, press SELECT. Use the Up/Down to set the desired room temperature, press EXIT to save.

SETUP AUXILIARY HEAT/REHEAT

Press MENU and AUTO buttons and scroll by pressing the Up/Down buttons through menu options. When SET AUX HEAT option is highlighted, press SELECT. Two options are offered, BASEBOARD or REHEAT.

If BASEBOARD is desired press SELECT button to select desired temperature dead band by scrolling through 2, 3 or 4 degrees, when selection is highlighted, press EXIT. Once desired HEAT DEAD BAND is set, press EXIT. Follow the same steps but highlight Reheat if desired. This will complete the setup for Auxiliary / Reheat.

TEMPERATURE FORMAT

Press MENU and AUTO button and scroll to TEMPERATURE FORMAT using the Up/Down buttons, when highlighted, press SELECT. Use the Up/Down buttons to choose F° or C°, press SAVE when selection has been made.

DAMPER ADJUSTMENT

The ST series zone dampers are factory set for full open and close operation. Each damper is equipped with adjustable stops for field setting the maximum open and minimum close positions if desired.