



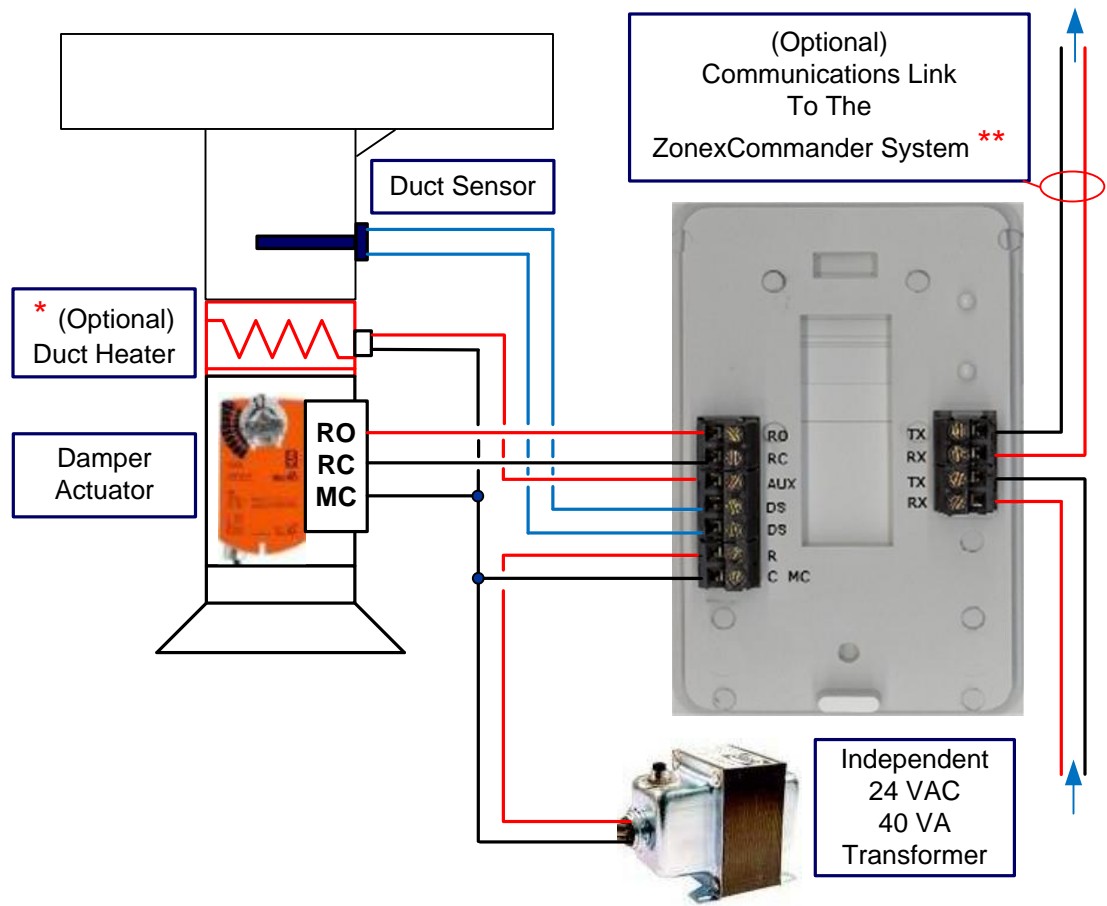
SAMOD II

Stand Alone Modulating
Damper Control

INSTALLATION INSTRUCTIONS

TERMINAL DESIGNATIONS

R	24 vac power input
C	24 vac power common
RO	damper run open signal
RC	damper run closed signal
MC	24V motor common
DS	duct temperature sensor
DS	duct temperature sensor
AUX	Auxiliary Heat
TX	Optional Comm Link
RX	Optional Comm Link



The Zonex SAMOD is an Auto Changeover thermostat that modulates a Zonex Damper based on supply air and room temperature. The SAMOD has 2 separate sensors, one senses room ambient and the other senses duct temperature. When the duct temperature is 7° above room temperature the thermostat operates as a heating thermostat. When the duct temperature is 3° below room temperature the SAMOD operates as a cooling thermostat. When the duct temperature is neither 7° above nor 3° below room temperature the damper will modulate to provide ventilation to the space.

Installation

Install the SAMOD II thermostat in the zone on an interior wall away from direct sunlight, supply air currents, or any heat-generating source.

Install a 24 volt, 40 VA transformer in accordance with local code requirements. From the transformer - run 18 gauge wires and connect to thermostat sub-base terminals R and C.

Install ST Series modulating damper or D-Fuser in supply air duct.

Wire supply damper to SAMOD II controller sub-base using three conductor 18 gauge thermostat wires.

Install Discharge Air Sensor (DAT) in the ductwork prior to the supply damper and run sensor wires down to SAMOD II controller location. If wires need to be extended, 18 gauge thermostat wires may be used, not to exceed 100 ft. in length. Duct Air Temperature (DAT) sensor wires are connected to the DS terminals of the SAMOD II sub-base.

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

****** SAMOD II is very versatile and may be utilized in a communicating format with the ZonexCommander family of DDC products. The room temperature and set points may be remotely displayed and revised via the Zonex software. This software also provides 7-day scheduling, the ability to remotely lock the SAMOD II, review or modify set points, and trend log on site or remotely over the Internet. (For Communicating Applications refer to the ZonexCommander Installation Manual)

SAMOD II Operating Instructions

The Heat and Cool Set Points can be displayed by pressing the **HEAT/COOL BUTTON**. The Current Temperature Set Point will be indicated on the upper right of the display.

To review the current **Duct Temperature**
Press and hold the Up and the Down Buttons simultaneously

Current Temperature

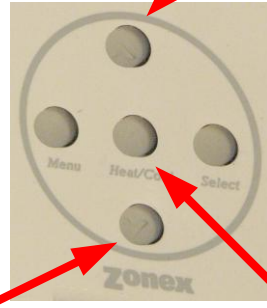
Current Temperature Set Point



COOL – If the “COOL SETTING” is displayed on the top right of the display, press the **UP or DN BUTTON** to change the cool set point.

If the “HEAT SETTING” is displayed and you want to change the Cool set point, press the **HEAT/COOL BUTTON** twice to change from “HEAT SETTING” to COOL SETTING”. Press the UP or DN button to change the set point.

UP BUTTON



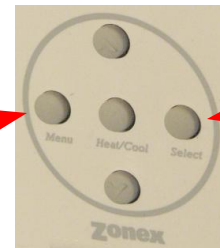
HEAT – If the “HEAT SETTING” is displayed on the top right of the display, press the **UP or DN BUTTON** to change the heat set point.

If “COOL SETTING” is displayed and you want to change the HEAT set point, press the **HEAT/COOL BUTTON** twice to change from “COOL SETTING” to “HEAT SETTING”. Then press the UP or DN button to change the set point.

DOWN BUTTON HEAT/COOL BUTTON

The **SAMOD II CONTROLLER** can be set up for **DIFFERENT MODES**
Auto, Cool Only, Heat Only or Off. Auto Mode is the default setting.

MENU BUTTON



SELECT BUTTON

AUTO MODE - Press and hold the **MENU BUTTON** and note the mode display begin to change. Press the **SELECT BUTTON** when **AUTO** is displayed.

COOL MODE ONLY - Press and hold the **MENU BUTTON** and note the mode display begin to change. Press the **SELECT BUTTON** when **COOL** is displayed.

HEAT MODE ONLY – Press and hold the **MENU BUTTON** and note the mode display begin to change. Press the **SELECT BUTTON** when **HEAT** is displayed.
(For Base Board or Reheat See Note *)

SYSTEM OFF - Press and hold the **MENU BUTTON** and note the mode display begin to change. Press the **SELECT BUTTON** when **OFF** is displayed. When the system is switched to its OFF MODE the Damper drives “closed” to its Minimum Position

NOTES:

Supplemental Heat - The SAMOD II is equipped with an Auxiliary contact to control a supplemental heating source, such as baseboard, radiant, duct heater or VAV box. Base Board Heat is controlled automatically when the room temperature drops 2 or more degrees below heat set point. The second stage is activated from the thermostat when the room temperature falls 2 degrees below the heat set point. At 2 degrees below room temperature the AUX Terminal will energize. At temperature set point the supplemental heat will be de-energized.

Reheat - To set up the SAMOD for REHEAT, press and hold the HEAT/COOL and the SELECT Buttons together, then press the MENU Button; Release all 3 Buttons and the ° Symbol will appear next to the Heat Point Temperature Display. An air proving switch (field supplied) must be used for reheat applications. A field supplied relay may be required for VAV box applications.

Slaving Dampers – Up to 3 dampers may be wired (slaved) to 1 SAMOD Thermostat

Remote Sensor – Remote Sensor is available, order PART # - SAMODRS

Damper Position – Min/Max settings adjustable at the actuator.

By-Pass - If more than 30% of the air is damper controlled utilize a By-Pass Damper to reduce Static Air Pressure

Field wiring should be 18GA minimum