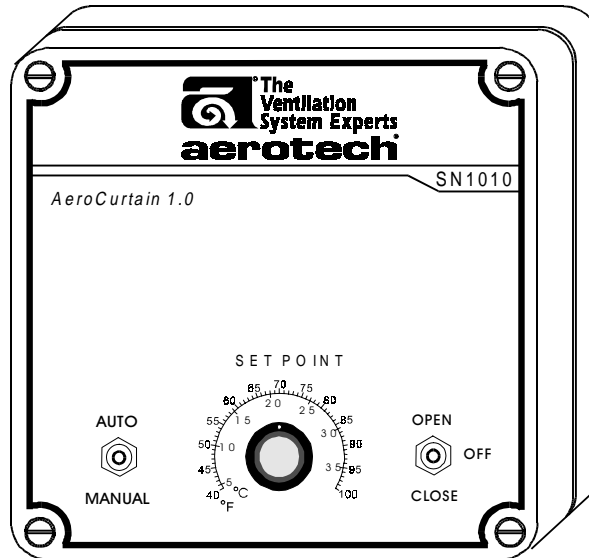


SN1010

NATURAL VENTILATION CONTROLLER



Aerotech, Inc.

4215 Legion Dr. Mason, MI 48854-1036 USA
Ph. (517) 676-7070 Fax (517) 676-7078

FORM: QM 1303

Dec. 1997

SN1010: NATURAL VENTILATION CONTROLLER

① INTRODUCTION

The SN1010 is a temperature controller used to operate natural ventilation curtains. A target set point can be specified, as well as opening, closing and off times for the curtains. Additional features include:

- overload protection on the output
- a 115/230 VAC - 50/60Hz power supply

② PRECAUTIONS

Although fuses at the outputs of the controller protect its circuits in case of an overload, we recommend installing an additional protection device on the controller's supply circuit.

The room temperature where the controller is located MUST ALWAYS REMAIN BETWEEN 32°F AND 104°F (0°C TO 40°C).

To avoid exposing the controller to harmful gases or excessive humidity, it is preferable to install it in a corridor.

DO NOT SPRAY WATER ON THE CONTROLLER

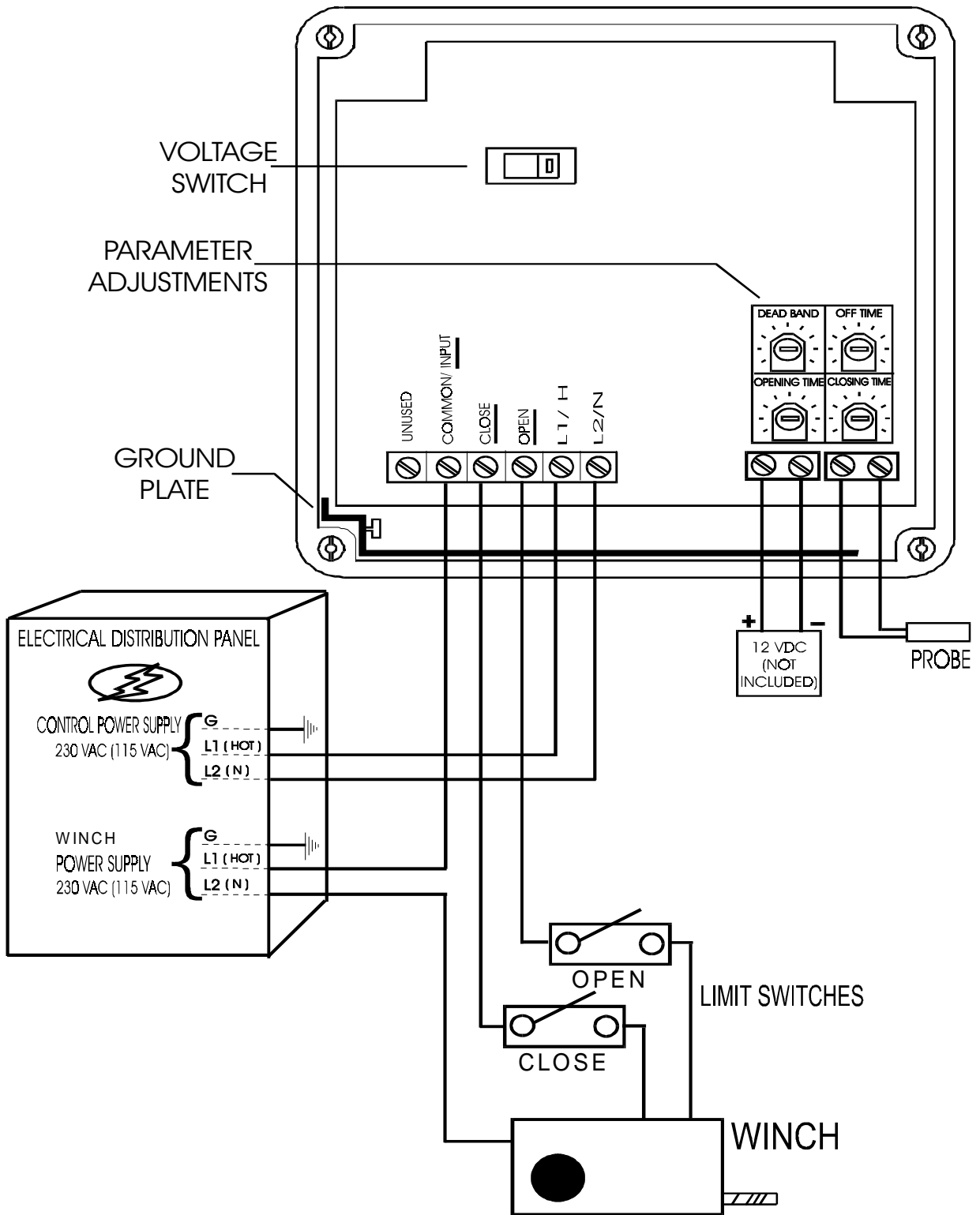
③ MOUNTING INSTRUCTIONS

Remove the four screws on the front cover and lift the cover. Mount the enclosure on the wall using three screws. Be sure the electrical knockouts are at the bottom of the enclosure in order to prevent water from entering the controller. Insert the screws in the mounting holes provided in three corners of the enclosure and tighten. Fasten the three black caps provided with the controller onto the three mounting holes.

④ CONNECTIONS

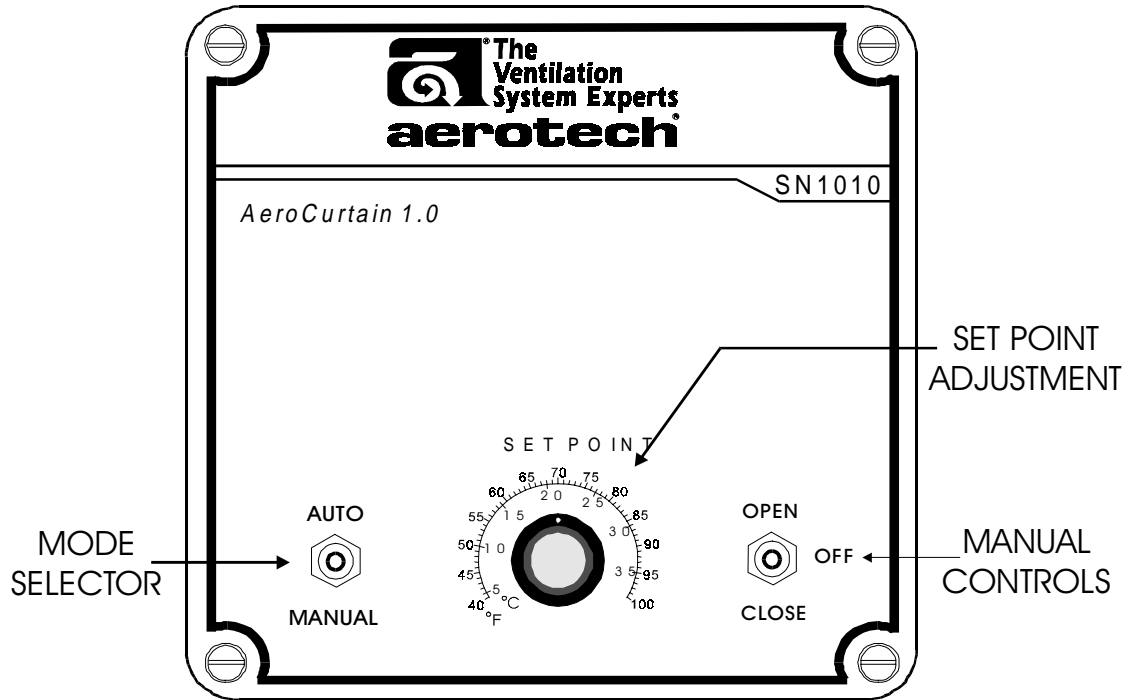
To connect the controller, refer to the wiring diagram enclosed with this user's manual.

- ⇒ Set the voltage switch to the appropriate voltage.
- ⇒ Use the electrical knockouts provided at the bottom of the enclosure. Do not make additional holes in the enclosure, particularly on the side of the enclosure.
- ⇒ If metallic cable holders are used to secure cables entering the enclosure, use the ground plate provided with the controller. Connect the ground wire to the ground stud on the plate.

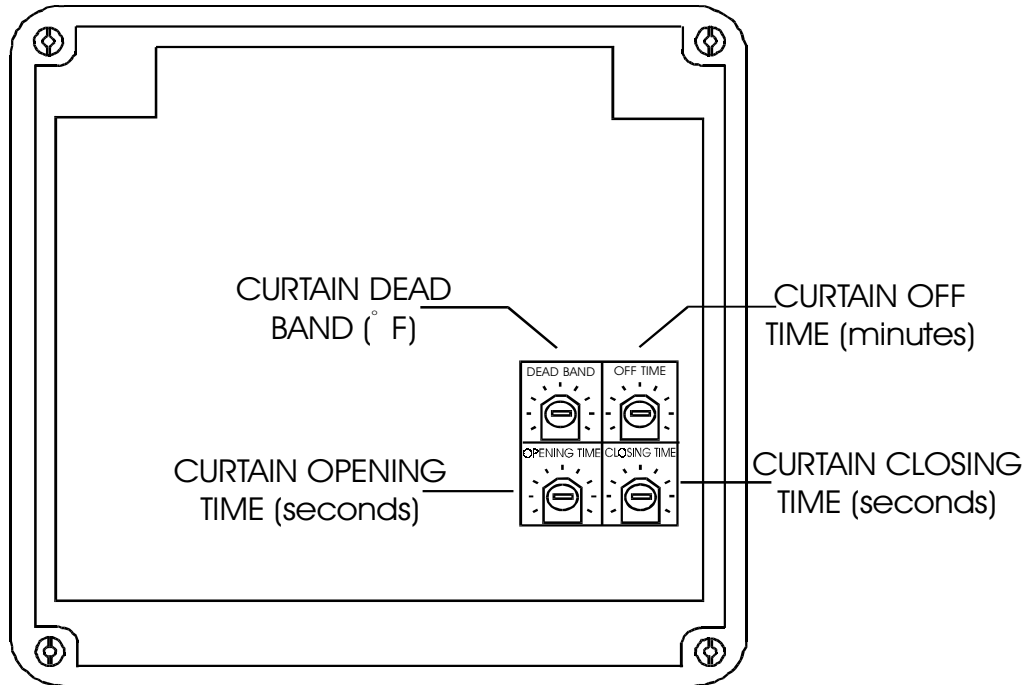


ALL WIRING MUST BE DONE BY AN AUTHORIZED ELECTRICIAN AND MUST COMPLY WITH APPLICABLE CODES, LAWS AND REGULATIONS. BE SURE POWER IS OFF BEFORE DOING ANY WIRING TO AVOID ELECTRICAL SHOCKS AND EQUIPMENT DAMAGE.

5 LOCATION OF THE CONTROLS



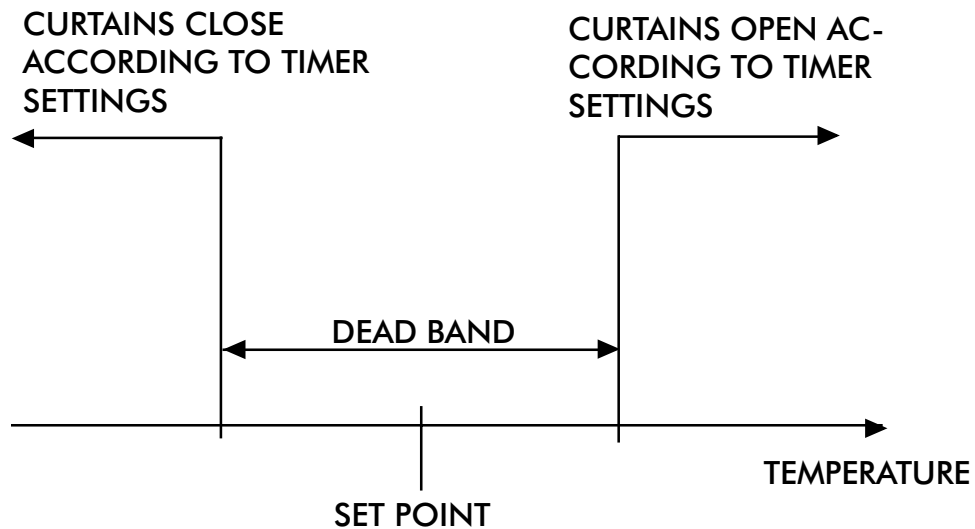
Front Panel



Inside Box

⑥ USING THE CONTROLLER

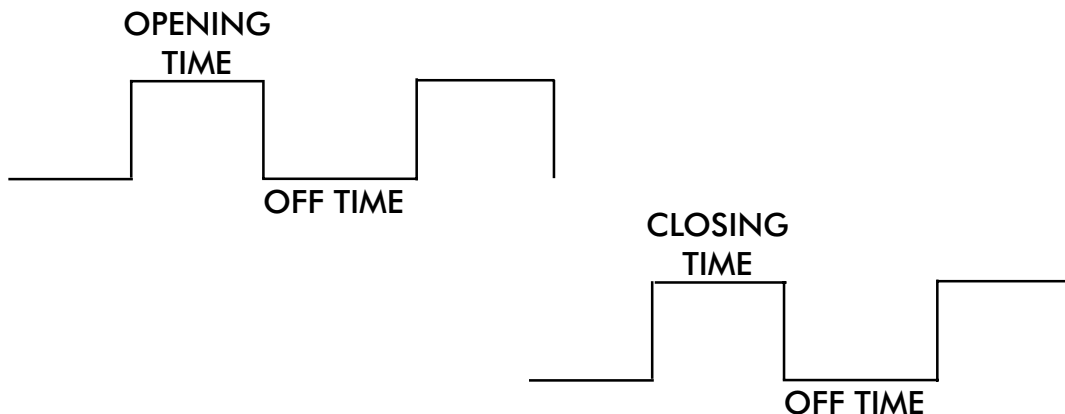
AUTOMATIC MODE



When the temperature rises to **Set Point + 1/2 (Dead Band)**, the curtains open according to the timer settings. When the temperature falls to **Set Point - 1/2 (Dead Band)**, the curtains close according to the timer settings. In between these two points, the curtains are at rest. The dead band can be adjusted from 1°F to 20°F (0.2°C to 11.1°C) using the potentiometer (TP1) inside the enclosure.

Timer Operation

The curtains open and close intermittently according to the timer settings. The off time is the time the curtains stop. It applies to both the opening and the closing cycles. It can be adjusted from 0 to 10 minutes using the potentiometer (TP2) inside the enclosure. The opening and closing times can be adjusted from 5 to 120 seconds using the potentiometers (respectively TP3 and TP4) inside the enclosure.



ADJUSTING THE SET POINT

The set point can be adjusted from 40°F to 100°F (4 °C to 38°C).

- Use the set point adjustment knob on the front panel to adjust the set point to the desired value.

MANUAL MODE

Toggle switches on the front panel allow the user to manually control the operation of the curtains. Place the left toggle switch in the manual position.

Use the right toggle switch to open, close or stop the curtains.

7 TECHNICAL SPECIFICATIONS

Supply: 115/230 VAC, 50/60 Hz.

12 VDC, if no AC voltage available.

Winch

Output: OPEN-CLOSE output, 115/230 VAC, 50/60 Hz, 30 VDC, 5A winch output, fuse F1-5A slow blow.

Use the right toggle switch to open, close or stop the curtains.

Enclosure: ABS, moisture and dust-tight.

**The room temperature where the controller is located
MUST ALWAYS REMAIN BETWEEN 32° AND 104°F (0° AND 40°C).**