


# Quick Start Guide



ZPS-H (Zone Presence Sensor - Hood)

For use with AVC5000 and AFC5000

 **Please read this entire document to familiarize yourself with the installation and wiring instructions for the ZPS-H Hood Presence Sensor. For additional details, refer to the individual product Submittal Drawings, User Manuals and Job-Specific Requirements.**

## APPLICATION

The ZPS-H Hood Presence Sensor is an optional sensor used with the AVC Fume Hood Control System, which will cause the AFC5000 to revert to the Setback mode when no one is standing in front of the hood thus reducing the exhaust. Upon the return of the occupant to the front of the hood, the ZPS-H will immediately signal the AVC Fume Hood Control System to return quickly to the normal working velocity set point.

## STEP 1: INSTALLATION


**CAUTION:** Wear eye protection, cut resistant gloves and clothing suitable for working with sheet metal. Failure to do so may result in personal injury.

### 1a. Location

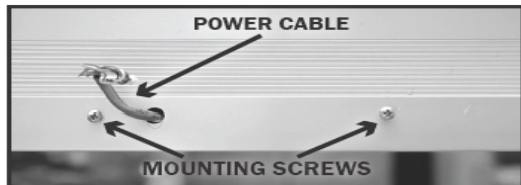
Select a flat surface on the front of the fume hood above the operator. Verify there is enough clearance behind the panel to accommodate the two mounting screws and the cable. If the location is suitable, adhere the mounting template to the surface.

### 1b. Prepare the Area

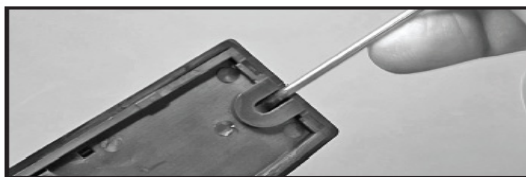
Using the mounting template as a guide, drill two holes for the mounting screws and one hole for the cable.

 **Caution:** Be sure to deburr the cable hole prior to inserting cable through the hole or the cable may be damaged.

Insert the provided cable through the hole from the front of the hood so that the terminal block is on the front of the panel. Insert mounting screws provided with kit partially, leaving space under the screw heads to slip the sensor under.



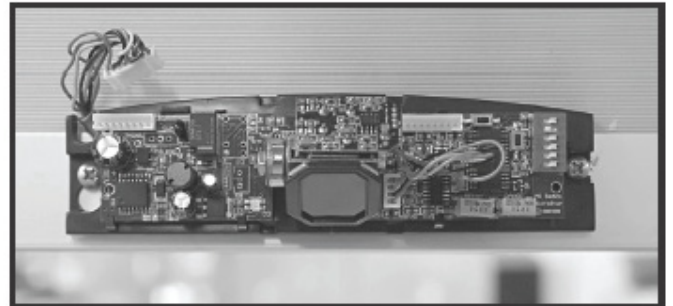
Power Cable and partially installed Screws



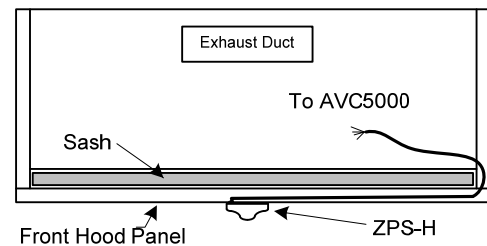
Insert Small Screwdriver and Pry Upwards to Remove Cover

### 1c. Mounting

Slip the mounting slots of the card under the screw heads. Carefully hand tighten the screws to hold the sensor in place.



ZPS-H mounted without cover, Cable Connected



Top View of Hood Showing ZPS-H cable routing

### 1d. Wiring

Connect the cable terminal block to the pins in the upper left corner of the ZPS-H sensor board and pull any extra cable through the hole. Route the cable to avoid moving hood sash components.

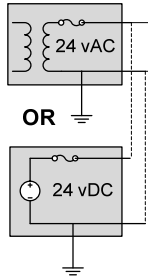
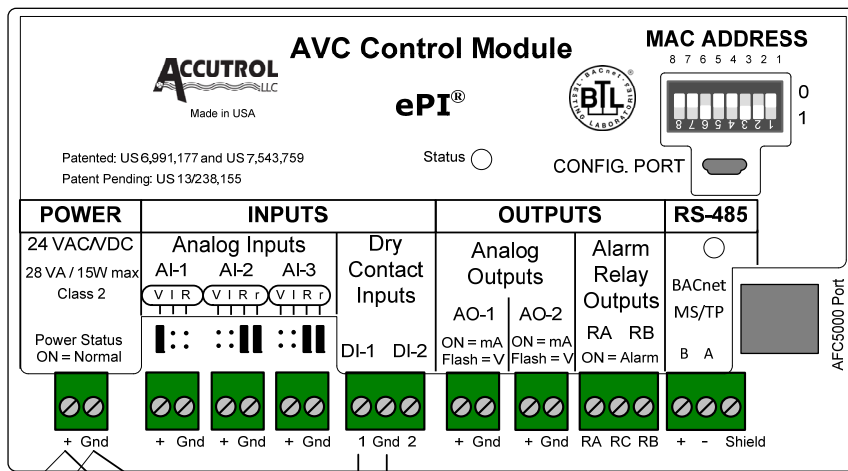
**Reference the wiring diagram at the top of Page 2.**

Connect the red and black wire from the ZPS-H to the power supply shared with the AVC5000 controller.

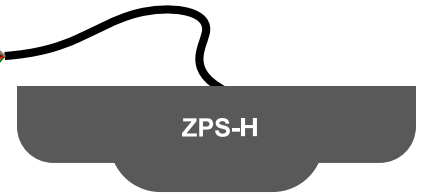
Connect the brown and white wires from the ZPS-H to the AVC5000 at DI-1.

### WIRING TABLE

ZPS-H	AVC5000
RED	24V (+)
BLACK	24V (Gnd)
BROWN	DI-1 (1)
WHITE	DI-1 (Gnd)
GREEN	No Connection



**Caution:** Maintain polarity if power source is used for multiple devices otherwise equipment may be damaged.

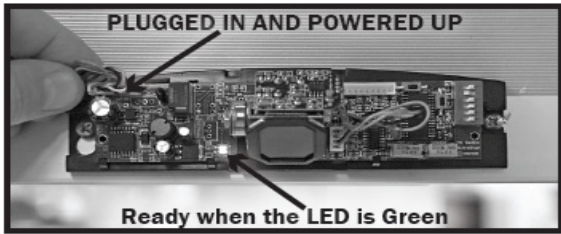


**Power Source**

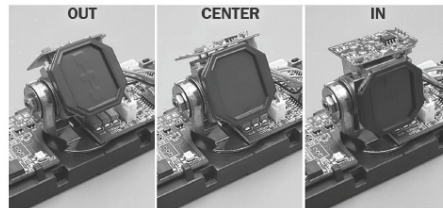
**STEP 2: START UP**

**2a. Power up**

Apply Power to the unit and wait for the LEDs to illuminate.



LED lights solid (Green = no detection, Red = detection)



**2c. Sensitivity Adjustment**

If you need to increase the sensitivity of the ZPS-H, turn the pot on the right marked "range" clockwise. When you are satisfied with the sensitivity of the unit, depress the **Reset Button** again and the ZPS-H will go into Normal Operating mode.

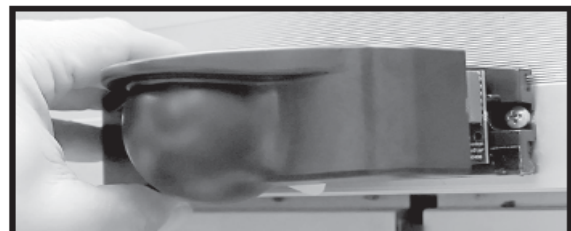
**2d. Delays**

If additional delays are required, they can be made in the AVC5000 on the Dry Contact Input via the Insight software when setting up the hood.

**2e. Verification**

Once the ZPS-H is set up, verify that the Digital input of the AVC5000 is configured to trigger the setback to lower flow and test entire system by walking in and out of the area in front of the hood to verify that the hood responds appropriately. Repeat walking test to verify proper operation.

To replace cover, engage cover on left side first then snap down.



**2b. Adjustment with Cover Off**

To quickly adjust pattern, press the **Reset Button** and then press & hold the **Install Button** 3 seconds (the LED will flash orange to confirm). This puts the ZPS-H into an install mode that is constantly sensing, but not driving the signal to the AVC5000. Test unit by walking in and out of the area in front of the hood, watch the LED and it will turn RED when it senses a person. If the unit does not sense presence appropriately, tip the sensor head in or out until it does. Walk in and out of the area several times to test.

