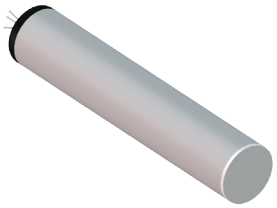


Humidity Sensor
921799, PA-56
Quick Sheet Instructions

Installation: Ventra Controllers

Suspend sensors from the ceiling to ensure free airflow. Sensors should hang close to the animals, but should be OUT OF THEIR REACH. For best results, keep the sensors out of sunlight, away from moving machinery, heaters, power wiring, sprinklers, and lights. The sensor comes attached to a short length of cable. Splice this cable with the existing shielded wire that runs to your controller.

1. Strip the outer jacket of the shielded wire to expose 1-1/2" (3.81 cm) of lead wires. **DO NOT** strip insulation from the lead wires. ***(Wire insulation must not be stripped when using Scotchlok® connectors.)***

Scotchlok® connectors are designed for 22 to 24 gauge wire. If 18 or 20 gauge wire is used for the sensor cable running to the controller, attach the sensor with wire nuts and wrap connections with electrical tape.

2. Your controller has input terminals labeled AIN, +12, GND.
   Pair cables/shielded wires, as shown in Figure 1.
3. Place the paired wires into the Scotchlok® connector. Be sure wires are fully inserted.
   Depress the red button evenly with pliers until the button is flush with the outer ring.

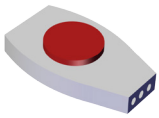
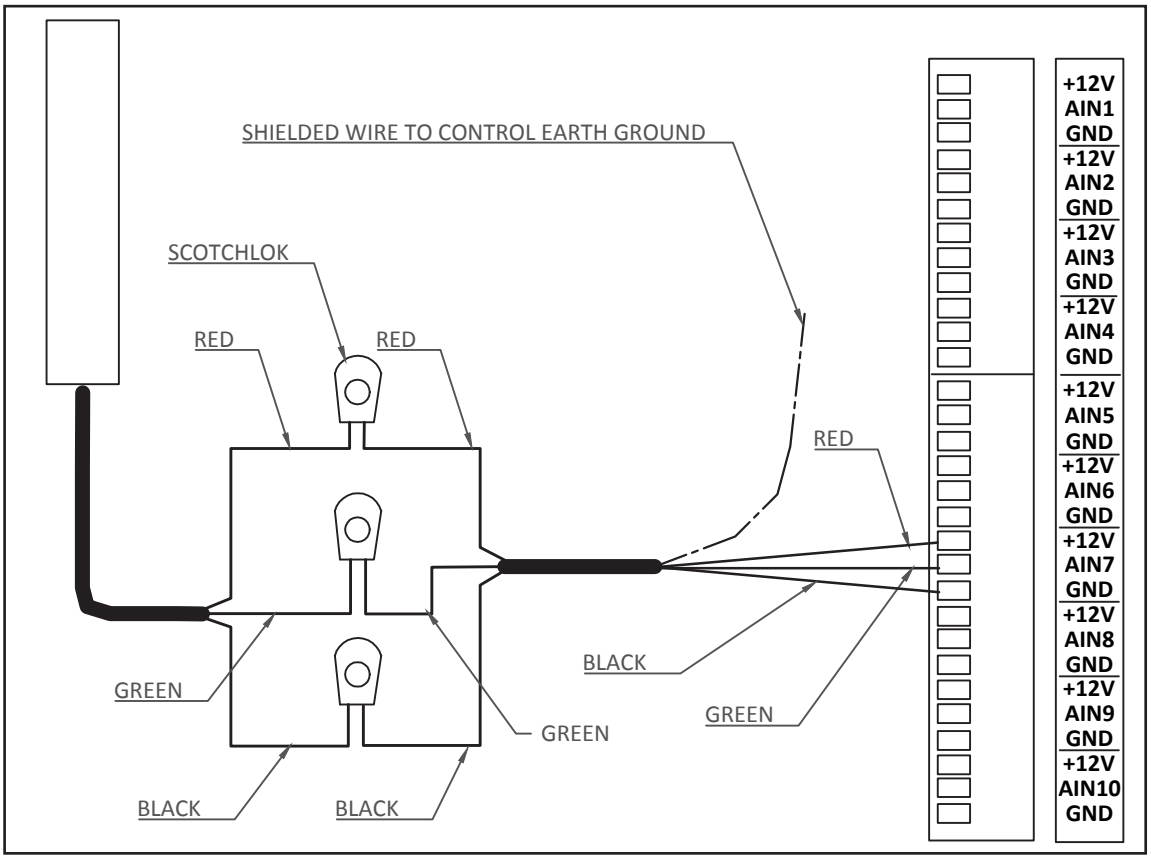


Figure 1



Setting Calibration Values: Ventra Controllers

Each humidity sensor has the calibration value CAL 1 = 6554, CAL 2 = 58982. These values are printed on the label affixed to the sensor. Enter the calibration values in the controller's SENSOR CALIBRATION AND SETTING menu item. If you are using a 4-channel such as the POLAIR, divide the calibration values by 16 (CAL 1 = 410, CAL 2 = 3686).

Refer to the controller's Operation Manual for information about humidity sensor calibration.

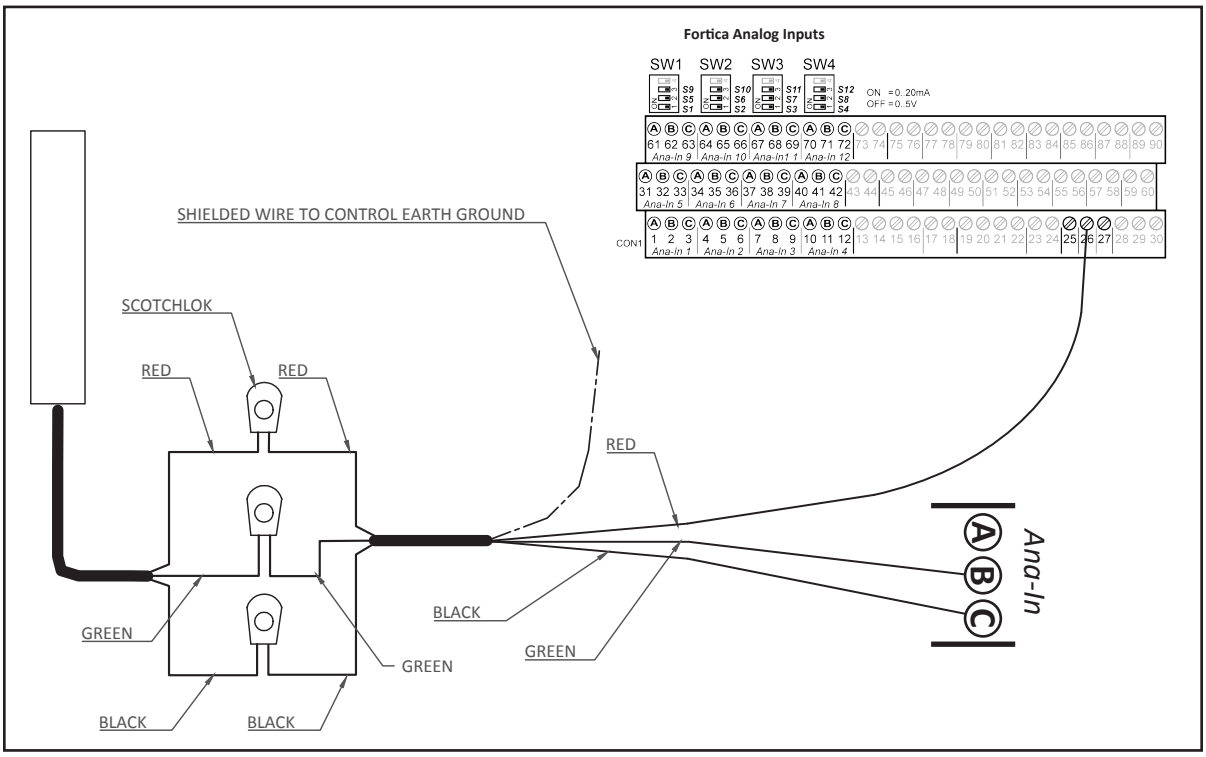
Installation: Fortica and Antares Controllers

Wiring: Fortica Controllers

For the Fortica controllers, connect the sensor, as shown in Figure 2.

- The Fortica input terminal corresponding to terminal B (signal) is the input terminal and should be connected to the green wire.
- Terminal C (GND) should be connected to the black wire.
- The red wire (12V) should be connected to terminal 26.

Figure 2

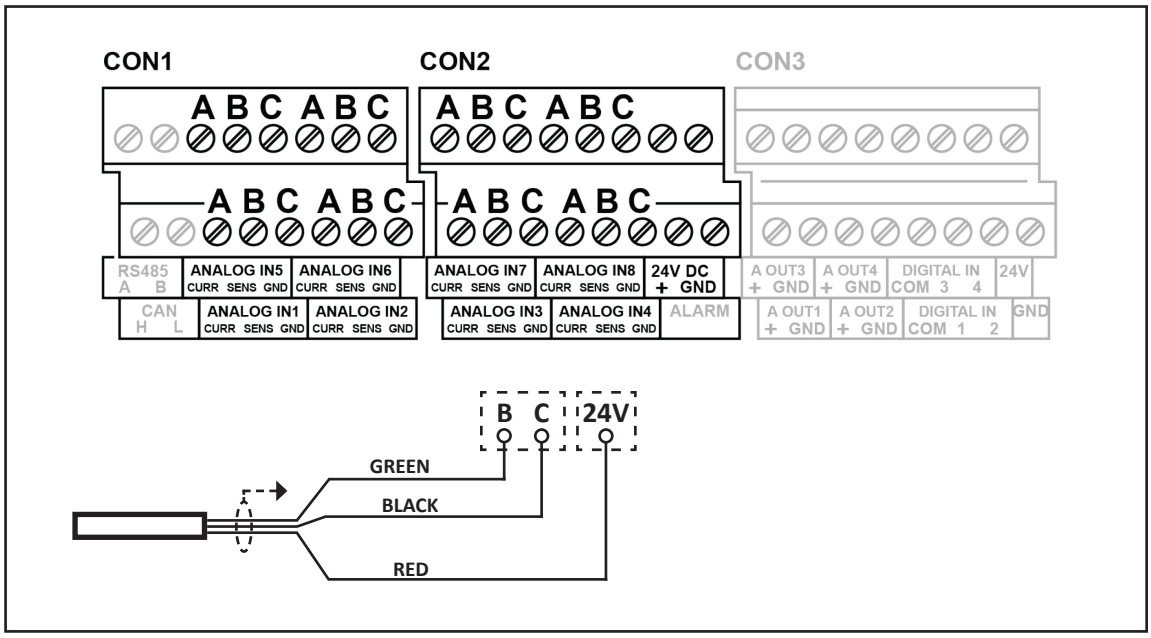


Wiring: Antares Controllers

For the Antares controllers, connect the sensor, as shown in Figure 3.

- The Antares input terminal corresponding to terminal B (signal) is the input terminal and should be connected to the green wire.
- Terminal C (GND) should be connected to the black wire.
- The red wire (24V) should be connected to terminal 15.

Figure 3



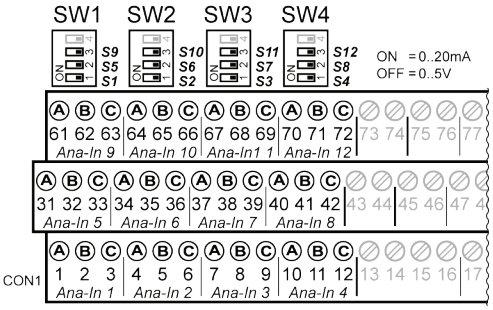
DIP Switch Settings: Fortica and Antares Controllers

In the Fortica controller, there are DIP switches that need to be set to configure the analog inputs for sensors. For our voltage based sensor the DIP switch corresponding to the input used for the sensor must be set to “off” which sets the input range to 0 to 5V input. Reference Figure 4 on the next page: there are 12 possible analog inputs available in the Fortica, select the DIP switch that corresponds to the one that is connected to the sensor, then ensure that it is set to the OFF position. The DIP switches are arranged as follows:

Analog Input 9 → SW1 (S9)	Analog Input 10 → SW2 (S10)	Analog Input 11 → SW3 (S11)	Analog Input 12 → SW4 (S12)
Analog Input 5 → SW1 (S5)	Analog Input 6 → SW2 (S6)	Analog Input 7 → SW3 (S7)	Analog Input 8 → SW4 (S8)
Analog Input 1 → SW1 (S1)	Analog Input 2 → SW2 (S2)	Analog Input 3 → SW3 (S3)	Analog Input 4 → SW4 (S4)

Analog Inputs: Fortica and Antares Controllers

Figure 4

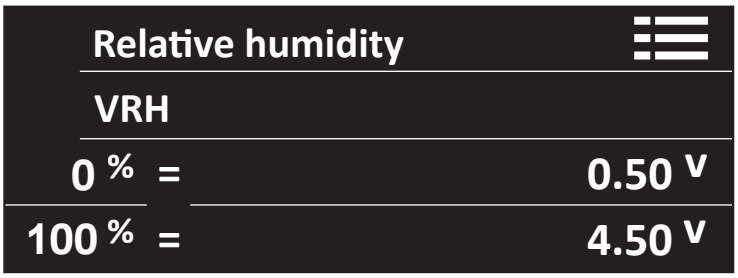


Please note, there are no needed DIP switch settings in the Antares controller for analog input configuration.

Calibration Settings: Fortica and Antares Controllers

In order for the sensor to give accurate readings, the sensor calibration settings must be entered into the Fortica and Antares controllers from the installation screen. Reference figure 5 below, set the input sensor range as follows to calibrate the sensor: 0.5V = 0%, 4.5V = 100%.

Figure 5



Maintenance: All Controllers

Cover the sensor ends when washing out the building. Wipe down with Oxivir® to clean as needed.

DO NOT USE A PRESSURE WASHER DIRECTLY ON SENSOR

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