

# SENSAPHONE®

## REMOTE MONITORING SOLUTIONS

### Sensaphone Duct Mount Airflow Sensor - FGD-0069-DUCT Installation Instructions

The Sensaphone Duct Mount Airflow Sensor will allow you to monitor the air velocity within an HVAC duct. The sensor will convert the air velocity to a 4-20mA signal. The signal can be scaled to either 0.5 - 8 m/sec or 0.5 to 16 m/sec by installing or removing a jumper at location SW1 on the circuit board. When the jumper is installed the range is 8m/sec and when removed it is 16m/sec. The sensor will work with any Sensaphone that will accept a 4-20 Input signal. The FGD-0069-DUCT will require a 24VDC power supply to operate (Part No: FGD-0070) for any Sensaphone that does not provide 24VDC output power.

**Notes on wiring:** Use 22AWG shielded wiring for all connections (e.g. Sensaphone Part No. FGD-0010) and do not locate the sensor wires in the same conduit with wiring used to supply inductive loads such as motors. Disconnect the power supply before making any connections to prevent electrical shock or equipment damage. Make all connections in accordance with national and local codes.

Described below is the correct way to wire your Airflow Sensor to your Sensaphone.

1. Follow your Sensaphone owner's manual to configure the input for a 4-20mA sensor.
2. Remove the sensor cover by removing the four screws with a Philips screwdriver.
3. Insert all wiring through the weatherproof connectors.
4. Connect the 24VDC Power Supply Positive (+) and Negative (-) to the terminals marked 24VAC/DC. Terminal #1 is Positive(+) and terminal #2 is Negative(-).
5. Connect a wire to the "4-20mA Flow" terminal #3 and run this to the Positive (+) numbered Input Zone on your Sensaphone.
6. Connect a wire to terminal #4 and connect the other end to the Sensaphone Input Negative (-) terminal.
7. To set the range to 8 m/sec, leave the jumper installed at location SW1. To set the range to 16m/sec, remove the jumper and place it over 'only one' of the pins for storage.
8. Program the Sensaphone Table Low (0.5) and Table High values (either 8 or 16) for the selected zone to match the setting in step 7.
9. Replace the cover, tighten the screws, and tighten the weatherproof wiring connectors.