



WireFree Eolis Sensor – Preliminary

Part #9013911

- I. The **Somfy WireFree Eolis** sensor (Figure 1) is a battery powered, 2-axis, vibration sensor that detects vibration of an awning caused by excessive wind. Upon detecting excessive vibration, the sensor emits an RF signal to retract the awning. The sensor is bound to an RTS motor as if it were a Telis transmitter. The sensor is housed in a weather resistant enclosure.
- II. **Preliminary specifications:**
 - a. Size: 45 mm X 100 mm X 32 mm
 - b. Lithium Battery Powered, minimum 7-year life. Assumes 50 "Wind Present" transmissions per day.
 - c. Range: 50' open air
- III. **Mounting considerations:** With the awning extended, the sensor must be mounted either horizontally or vertically; not on an angle. Either end of the front bar is the preferred mounting location with the awning arms being a secondary possibility. For proper operation, the awning should be rigidly mounted to avoid excessive vibration.
 - a. Horizontally: When mounting horizontally (Sensor A parallel to the ground) Adjust set point A to setting F and set point B to setting 0.
 - b. Vertically: When mounting vertically (Sensor B parallel to the ground) Adjust set point A to setting 0 and set point B to setting F.
- IV. **Binding Sensor to Motor – Prior to mounting:**
 - a. Set both set points 0
 - b. Set DIP switches as shown in Figure 2 – Set Up

- c. Insert battery
- d. Put RTS motor in program mode by depressing the program button on original transmitter. Motor jogs.
- e. Push the program button on the sensor. Motor jogs. The sensor is now bound to the motor.
- f. Set the DIP switches to Run as shown in Figure 3.
- g. To test: Depress the program button and verify that the awning retracts.

V. **Mounting:** Adjust the set points as described in I. above. Install cover. Once the location is chosen mount the sensor using self-tapping sheet metal screws. While mounting the sensor, be certain to have the original transmitter nearby, as the sensor will most likely send an up command due to handling.

VI. Operation:

- a. There must be two vibration events exceeding the threshold within 15 seconds for the sensor to send an UP command.
- b. There is a delay of 4 seconds between the first vibration event and the sensing of the second vibration event. This is needed to prevent nuisance trips caused by the awning arms releasing upon start-up and the awning stopping upon reaching the extended limit.
- c. If the awning is fully retracted and a down command is sent, a subsequent stop or up command sent within 15 seconds will likely cause the sensor to send an up command.
- d. If the awning is started and stopped within 15 seconds from any position, the sensor will likely send an up command.
- e. The sensor requires 10 seconds of calm before it will send a second signal. This delay prolongs battery life.
- f. When the battery is near full discharge, the sensor will send an up command and shut down.

Sensor Component Location and Identification

Figure 1

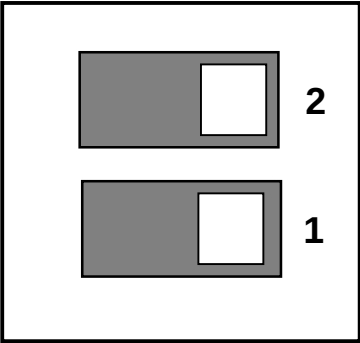
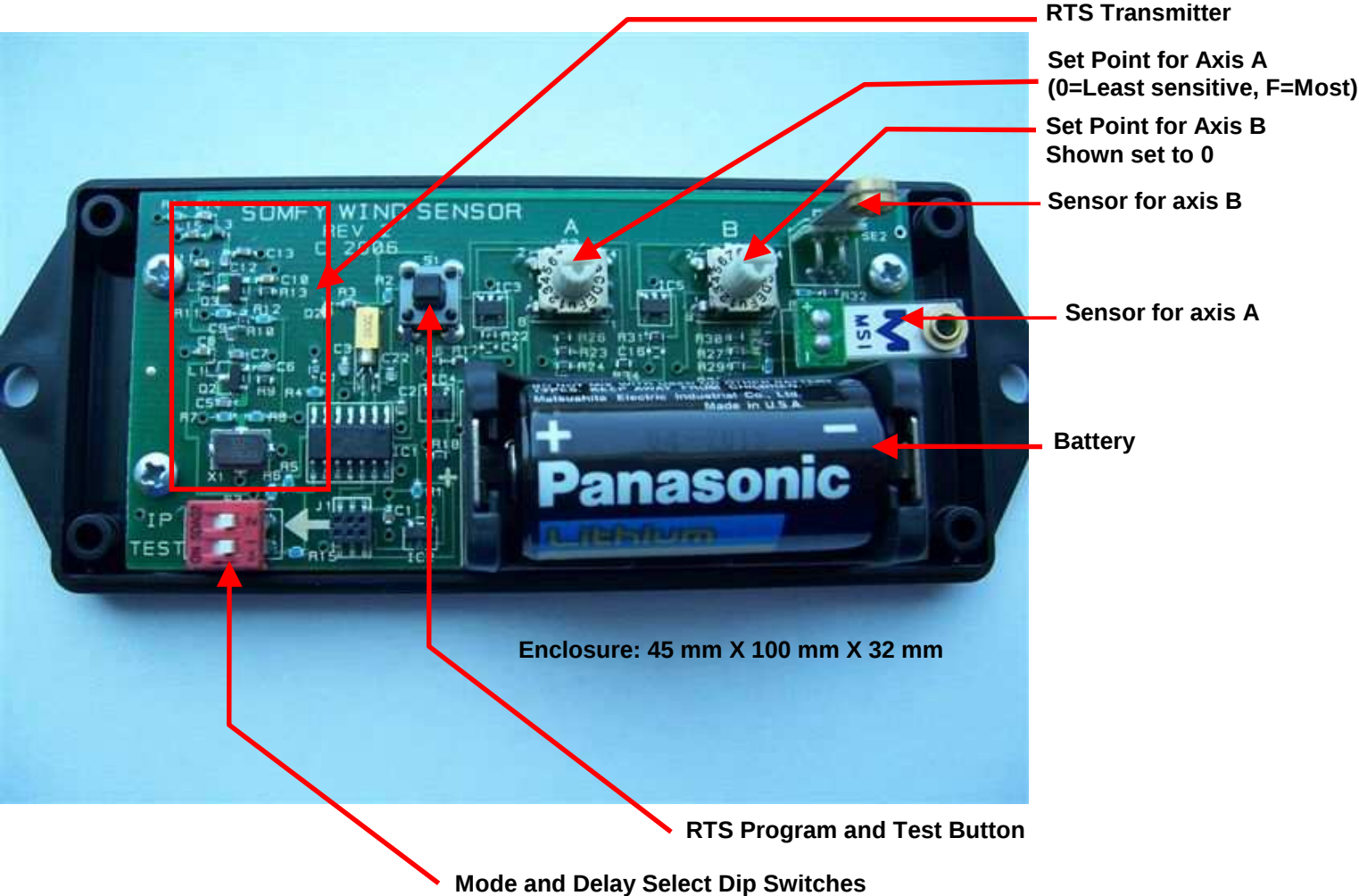


Fig. 2 Set-Up

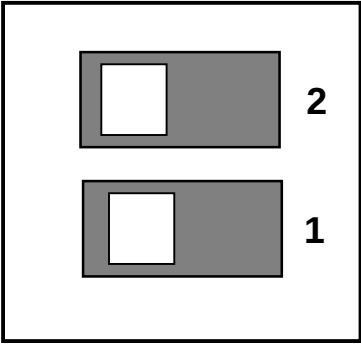


Fig. 3 Run

FCC Information

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a CLASS B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- 1.1 Reorient or relocate the receiving antenna.
- 1.2 Increase the separation between the equipment and receiver.
- 1.3 Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 1.4 Consult the dealer or experienced radio/TV technician for help.

Warning

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.