Car top ELGO Tape Head & Door Zone Vane Sensor Installation

See Figures: 1 & 2 below to review Virginia Controls new combination bracket to support both the ELGO Sensor Head and the Vane Sensor for the APS Door Zone System.

1. Install the car top bracket assembly per the diagram below, (Figure 1). Keep in mind that the tape and door zone vanes mount off of the guide rail. A target distance for the Tape to Rail C/L is approximately 14”. There is room for adjustment as all equipment varies in size.

2. The “U” shaped vane sensor shall be mounted on the car top per the diagram shown below in (Figure 1). The target distance for the Vane to Rail C/L is approximately 10”. Again the is room for adjustment.

3. Attach the ELGO sensor head (item #7) to the car top assembly using the ELGO angle mounting bracket provided (item #6). The end of the head with the cable outlet and LEDs must face upward.

4. Adjust the sensor head using the magnetic tape as a reference. First, align the centerline of the head to the centerline of the tape.

5. Pass the tape through the sensor. Carefully loosen the cotter key and release/hold the polymer guide. Insert the tape and re-attach the guide with the cotter key with the tape in position.

6. Check for proper alignment of tape vs. sensor. Any angular offset should be corrected. (See Vision User Manual)

7. INSTALLATION CHECK:

Run an inspection trip the entire length of the hoistway. Observe the system paying attention to the respective positions of tape and sensor head.

After completion of the installation, clean the magnetic tape using a dry cloth. Be specifically alert if steel construction work is taking place in the hoistway. Steel particles will adhere to the magnetic band which will cause damage if not removed.

Figure 1: Car Top Landing System Bracket Assembly
APS Door Zone Hoistway Vane Installation

The vane sensor shall be mounted on the car top per the drawing shown in Figure 2. The 6” tall metal vane shall be mounted off the guide rail at the same height from each hoistway sill so to pass through the vane sensor per Figure 2. The actuation of the sensor is an active switch and does require a 24VDC power source. The sensor switch is a normally closed contact that opens when the metal vane passes through the Cedes vane switch. The three wires of the sensor connect to car top terminals 24V, COM, and 20X. Verify that the sensor switch contact opens and closes immediately when passing the metal vane at each floor.

Figure 21: Vane Installation Options