USERS GUIDE

FOCUS AND FOCUS 2

PRESENCE SENSOR

SAFETY PRECAUTIONS

- Shut off all power going to the header before attempting any wiring procedures.
- Maintain a clean & safe environment when working in public areas.
- Constantly be aware of pedestrian traffic around the door area.
- Always stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- Always check placement of all wiring before powering up to insure that moving door parts will not catch any wires and cause damage to equipment.
- Ensure compliance with all applicable safety standards (i.e. ANSI A156.10) upon completion of installation.

The Focus presence sensor (PN: 10FOCUS or 10FOCUS2 - for recessed mounting) may be used for various applications, including but not limited to revolving doors, drive-up windows, sidelite protection for sliding doors, and industrial applications. The sensor is fully adjustable and has a relay output for easy compatibility to external devices.

ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS

Circuit board components are vulnerable to damage by electrostatic discharge (ESD). ESD can cause immediate or subtle damage to sensitive electronic parts. An electrostatic charge can build up on the human body and then discharge when you touch a board. A discharge can be produced when walking across a carpet and touching a board, for example. Before handling any board, make sure you dissipate your body's charge.

PRODUCT DESCRIPTION

DESCRIPTION	SPECIFICATION
Power Supply	24 V AC / V DC +/- 10%
Current Consumption:	On = 60 mA max. Off = 30 mA max.
Output Interface; relay	Relay; max. contact rating is 1A @ 30v (resistive)
Detection Range	0' to 8'2" (2.5 m)
Distance Adjustment	2 ft. up to 8 ft. (.61m up to 2.44m) rotating cam with linear adjustment
Detection Time	< 50 ms
Detection Signal Duration	Infinite Presence Detection
LED Indications	Green LED = Detection
Operating Temperature Range	-30° F to 140° F
PCB Dimensions	Master: 6.63" x 1.5" (168mm x 38mm)
Connection to Controller	5 conductor cable
Detection Mode	NO or NC

- Ground yourself by touching a conductive surface of the door or other element connected to common earth ground to discharge the static electricity present in your body.
- Avoid walking around while replacing items inside the case, especially if you are on carpet or during conditions of low temperature and low humidity.
- Handle the board by the edges only to avoid touching electronic components.
- Store a loose board in an anti-static bag.

INSTALLATION & WIRING

NOTE: There are similarities and slight differences in the installation, wiring and setup of the Focus and Focus 2. These similarities and differences are noted throughout the document.

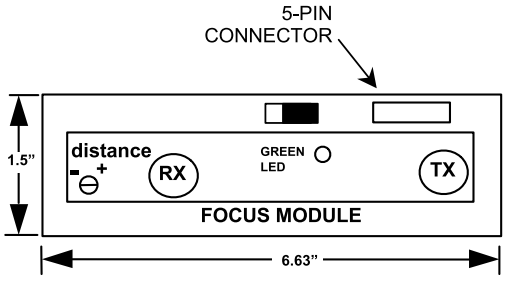
Installation of the sensor (Focus and Focus 2):

1. Remove the end-caps and lens from the sensor (Focus).
2. Drill holes in necessary locations near the ends of the extrusion (Focus).
3. Determine mounting location for the sensor (Focus and Focus 2).
4. Mount the sensor using the enclosed screws (Focus and Focus 2).

Wiring the sensor:

1. Locate the 5-pin connector on the circuit board and wire according to the drawing below (Focus and Focus 2).
2. Carefully route the harness out of the housing. The endcap has a breakaway notch if the wire is to be routed external to the sensor, otherwise, the harness can be neatly routed underneath of the endcap (Focus).
3. Replace the lens and end-caps once installed (Focus).

Wire Color	Connection
Red	N.O. Relay Contact
Black	N.C. Relay Contact
Brown	COM Relay Contact
White	24 V AC / V DC
Green	24 V AC / V DC

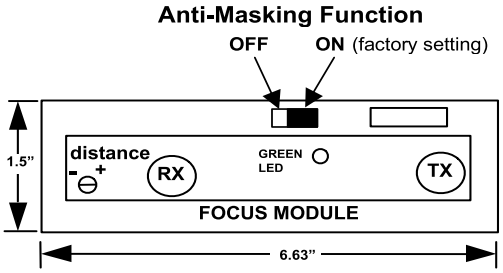


Configuring of the sensor (Focus and Focus 2):

1. The Anti-Masking Function of the sensor has 2 configurations:

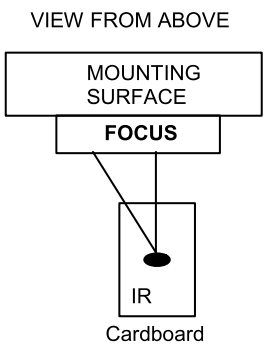
-ON: detection occurs even if the receiver collects no signal (factory setting)

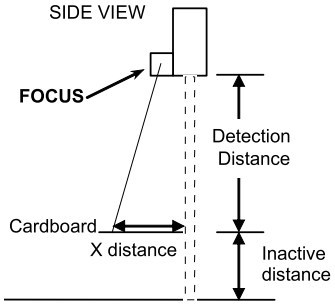
-OFF: no detection occurs if the receiver collects no signal

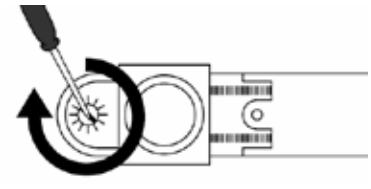


ADJUSTMENT OF DETECTION DISTANCE

CHART 1 (Distance From Face of Door at Inactive Zone Height)							
	ANGLE of PBC	0°	5°	10°	15°	20°	25°
INACTIVE DISTANCE							
8"		0	6"	12 1/2"	19 1/4"	26"	33 1/4"
12"		0	6"	12"	18"	24 1/4"	31 1/2"
16"		0	5 1/2"	11 1/4"	16 3/4"	23 1/4"	29 1/2"
20"		0	5 1/4"	10 1/2"	16"	21 1/2"	27 1/2"
		DISTANCE FROM FACE OF DOOR (X DISTANCE)					







NOTE: The Focus 2 is not configured to allow angle adjustment. The Focus 2 only allows for height adjustment.

Use the procedure listed below to adjust each detector in order to obtain detection 12" to 16" above the floor (Focus and Focus 2).

1. Use a white, gray, or black piece of cardboard about 8" x 11" and hold it as shown in the above diagrams.

2. Move the cardboard from the floor upward until it is detected. This will determine the height of the inactive zone (X distance).

3. Measure the height at which the cardboard was detected.

4. If this height does not fall between 12" & 16" above the floor or does not meet your requirements, an adjustment must be made to the detection distance. The distance adjustment potentiometer is near the left side of the PCB, (opposite side of wiring connector). On the Focus 2 the adjustment potentiometer is accessible by removing one of the hole plugs located on the front face or back of the sensor.

A) If the inactive Zone is too high: Turn the distance potentiometer clockwise to increase the detection distance

B) If the inactive Zone is too low: Turn the distance potentiometer counter-clockwise to decrease the detection distance.

NOTE: One notch of the distance adjustment corresponds to approximately 4".

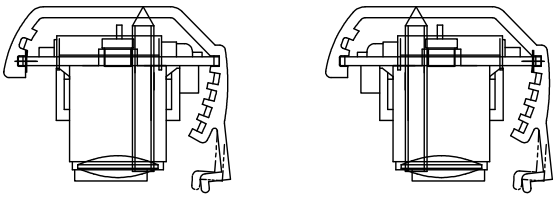
6. Repeat this procedure until the desired distance is achieved.

7. Make sure the door opens completely to ensure that the detector does not trip when there is no obstacle.

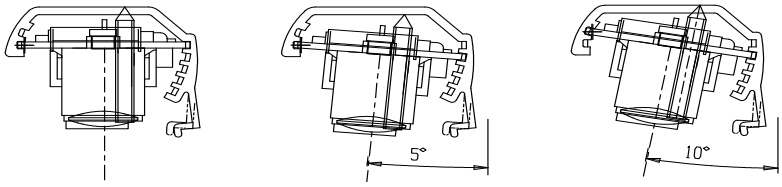
8. If there is detection, turn the distance adjustment counter-clockwise 1 to 2 notches OR change the lateral position of the module OR modify the angle adjustment of the lens.

SURFACE APPLIED MOUNTiNG ANGLES

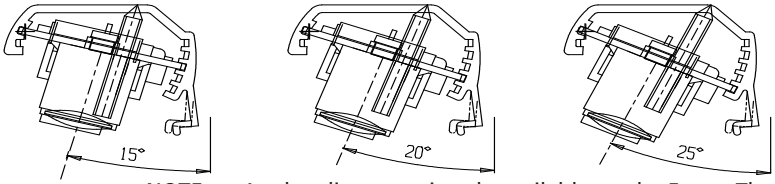
HINGE SIDE RIGHT HINGE SIDE LEFT



Angles of 0° through 10° shown below



Angles of 15° through 25° shown below



NOTE: Angle adjustment is only available on the Focus. The Focus 2 does not allow for angle adjustment.