BEA 10FLYKITB Fly Kit Request to Exit Sensor User Guide

Contents

BEA 10FLYKITB Fly Kit Request to Exit Sensor

Product Information

- **Product Name:** FLY AND FLY ERT Request
  - to – Exit Sensor (US version)
- **Product Components:**

- 2 FLY CEILING ADAPTER (FCA)
- 1 FLY SURFACE ADAPTER (FSA)

- **Product Description:** The FLY sensor is designed for use as a request-to-exit sensor. It uses passive infrared technology to detect temperature changes, such as body temperature, for motion detection. It is not recommended for use on pedestrian automatic doors as it may not recognize motion associated with inanimate objects like hospital beds, gurneys, shopping carts, etc.
- **Precautions:**
  - Before performing any wiring procedures, make sure to shut off all power going to the header.
- Maintain a clean and safe environment when working in public areas.
- Be aware of pedestrian traffic around the door area.
- Stop pedestrian traffic through the doorway when performing tests that may result in unexpected reactions by the door.
- Check the placement of all wiring to ensure that moving door parts do not catch any wires and cause damage.
- Ensure compliance with applicable safety standards upon completion of installation.
- Do not attempt any internal repair of the components. All repairs and component replacements must be done by BEA, Inc.
- Unauthorized disassembly or repair may jeopardize personal safety, expose one to the risk of electrical shock, and void the warranty.
- The door control system and the header cover profile must be correctly grounded.
- Only trained and qualified personnel are recommended for installation and setup.
- Always test the proper operation of the installation before leaving the premises.
- Unauthorized repairs or attempts made by unauthorized personnel will invalidate the warranty.

Product Usage Instructions

Preparing the Sensor:

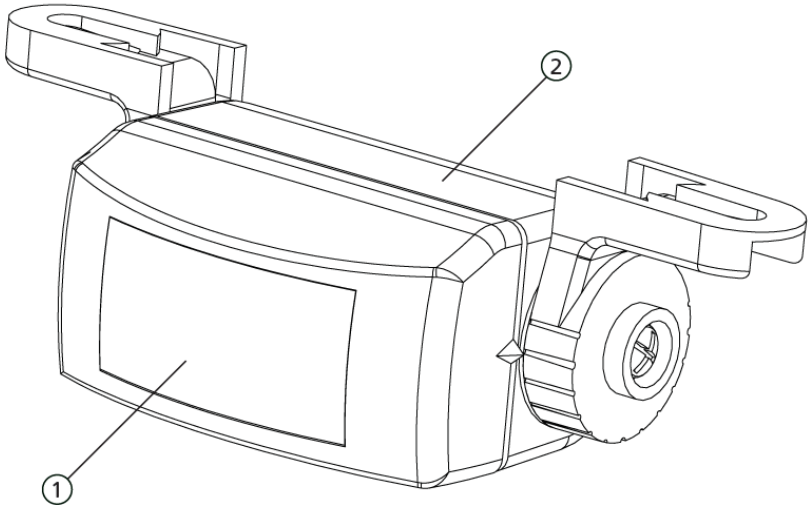
1. Insert a small screwdriver on the side of the housing and gently pry off the cover.
2. If the mask needs to be removed, pry up with a screwdriver on the small legs of the lens.
   - Adjust the sensing field by removing segments of the mask with a diagonal cutter or similar tool. See the diagrams below for detection patterns.
   - Full Detection Pattern: Remove the gray portions to achieve the desired field (no mask).
3. **Asymmetric Detection Pattern**
   - Shorter Depth Detection Pattern

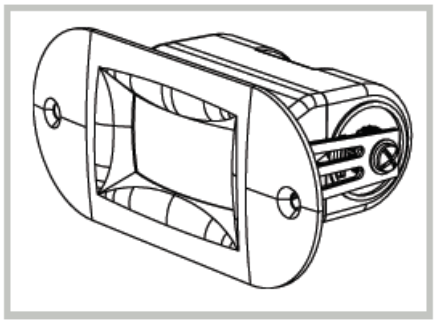
     Note: It is not necessary to use the mask. Installing the lens without the mask allows maximum detection size. If using the mask, cut at least one segment to allow detection.
4. Reinstall the mask (if needed) by placing it inside the cover so that the legs of the mask slide into the clips. Gently work the mask's legs until it clicks.
5. Adjust DIP switches for application. See the table below for DIP switch settings. 6.Replace the cover by matching the small tab (center of cover) to the slot in the housing, then gently push the cover until it snaps.

   DIP Switch Settings:
   1. Sensitivity: ON for high sensitivity, OFF for low sensitivity.
   2. Relay Output: ON for passive output, OFF for active output. Please refer to the user manual for more detailed information and diagrams regarding product installation and setup.

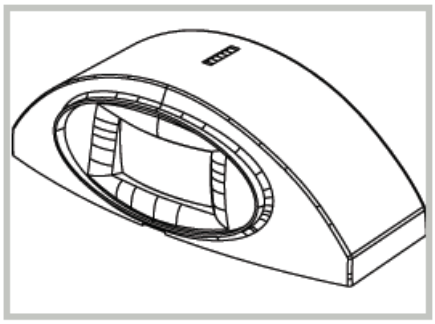
DESCRIPTION

1. Lens (mask inside)
2. Housing (sensor inside)





FLY CEILING ADAPTER (FCA)



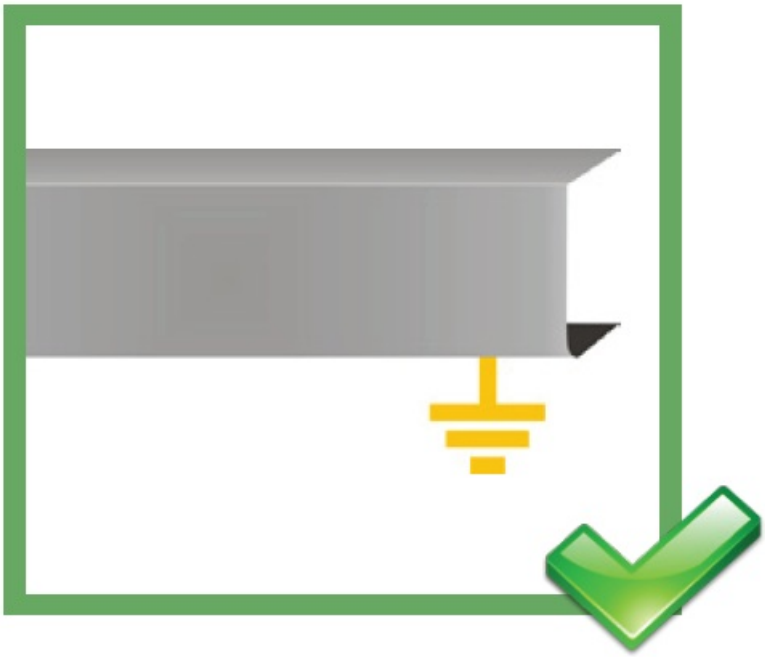
FLY SURFACE ADAPTER (FSA)

The FLY is not recommended for activation on pedestrian, automatic doors because the passive infrared technology recognizes temperature changes (e.g. body temperature) for detection.
As such, the FLY will not recognize motion associated with inanimate objects such as hospital beds, gurneys, shopping carts, etc.

PRECAUTIONS

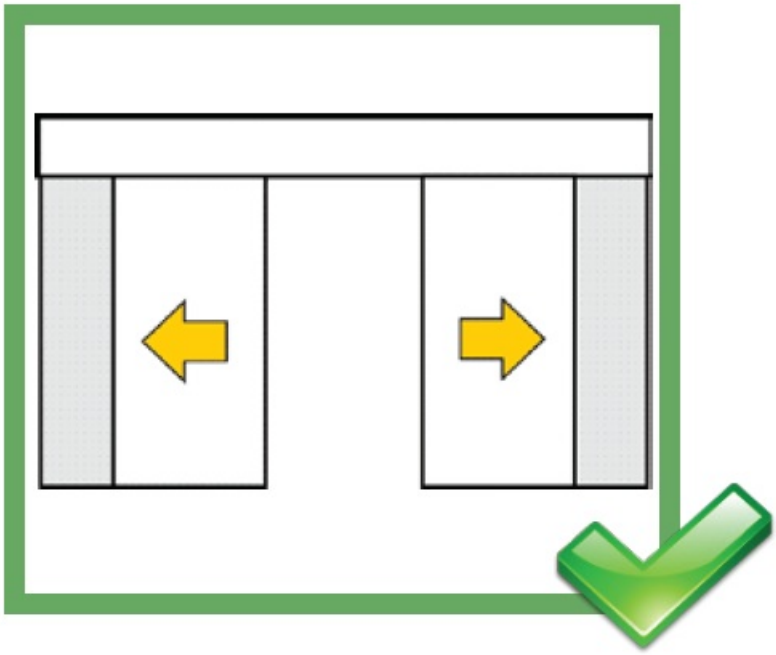
- Shut off all power going to header before attempting any wiring procedures.
- Maintain a clean and safe environment when working in public areas.

- 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 ensure 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.
- DO NOT attempt any internal repair of the components. All repairs and/or component replacements must be performed by BEA, Inc. Unauthorized disassembly or repair:
    1. May jeopardize personal safety and may expose one to the risk of electrical shock.
    2. May adversely affect the safe and reliable performance of the product resulting in a voided warranty.

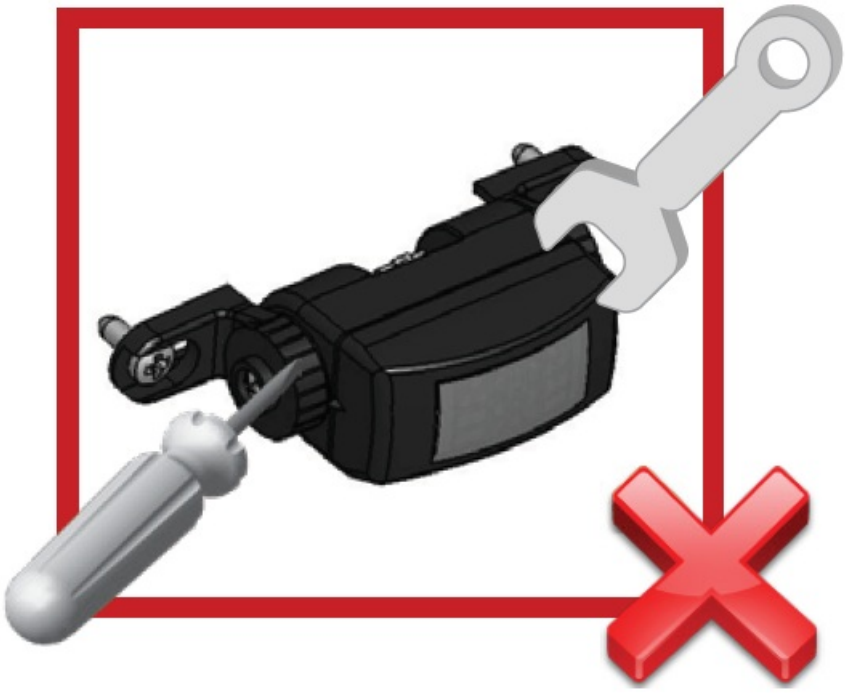


The door control system and the header cover profile must be correctly grounded.

Only trained and qualified personnel are recommended to install and set up the sensor.

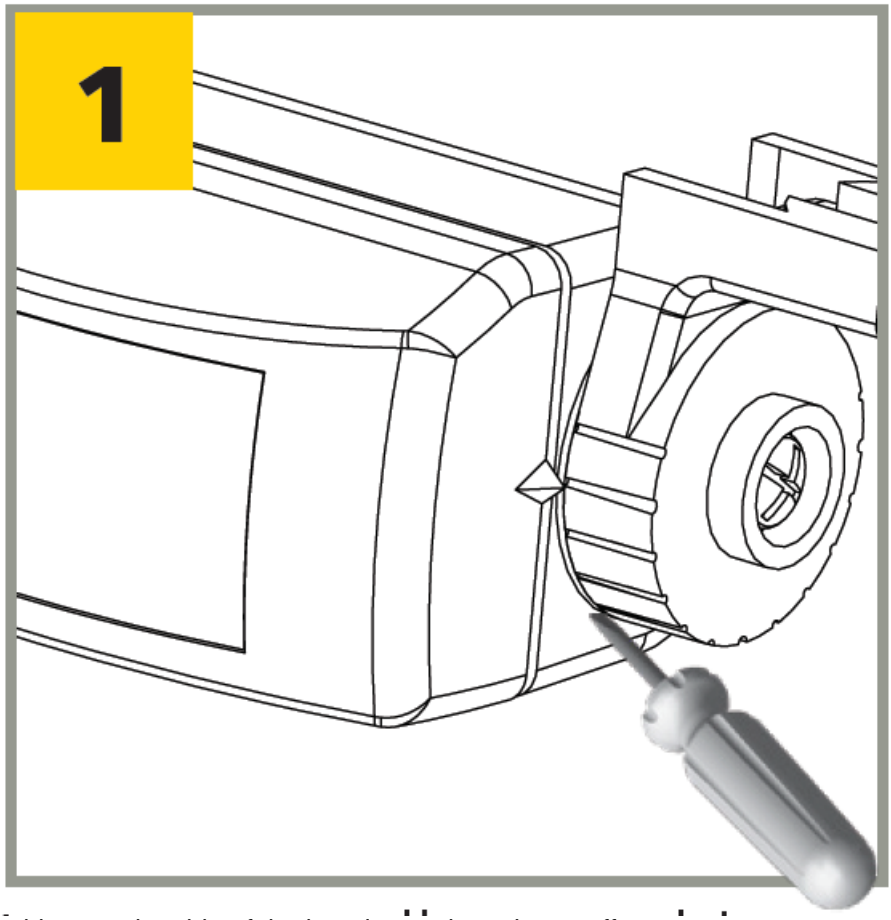


Always test the proper operation of the installation before leaving the premises.

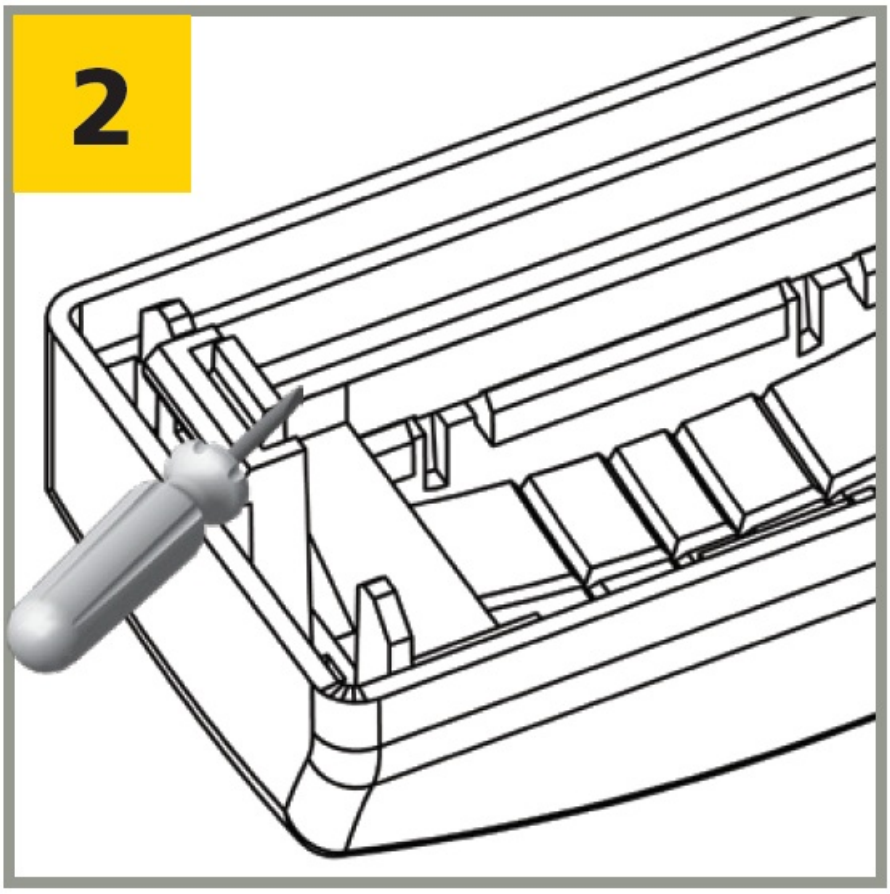


The warranty is invalid if unauthorized repairs are made or attempted by unauthorized personnel.

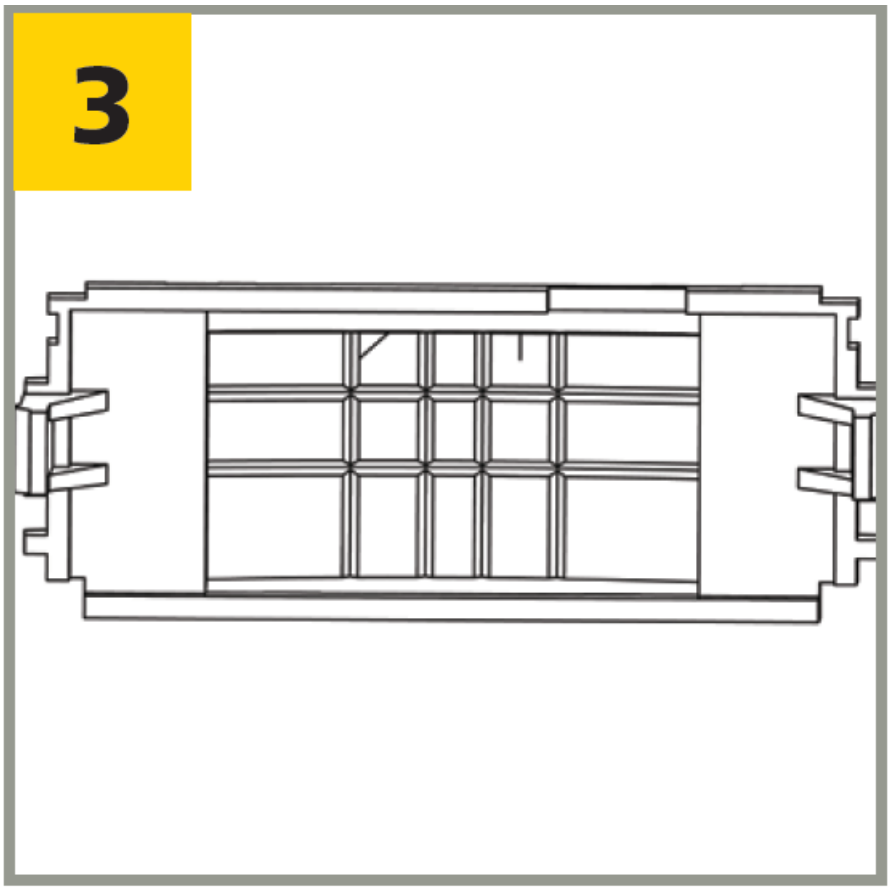
PREPARING THE SENSOR



Insert a small screwdriver on the side of the housing and gently pry off cover.

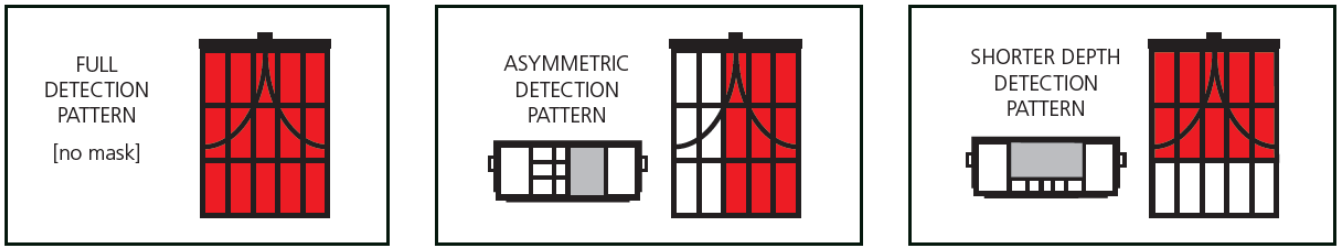


If the mask needs to be removed, pry up with a screwdriver on the small legs of the lens.



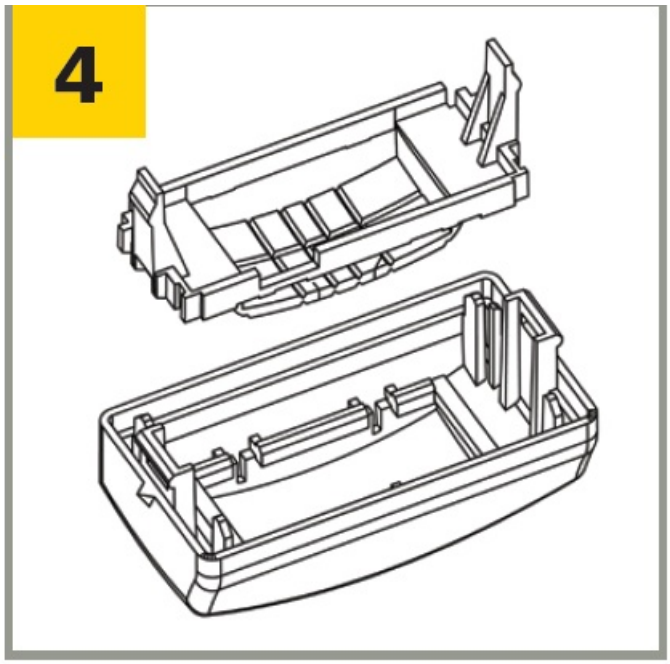
Adjust sensing field by removing segments of the mask with a diagonal cutter (or similar).1
See diagrams below for detection patterns.

remove gray portions to achieve desired field

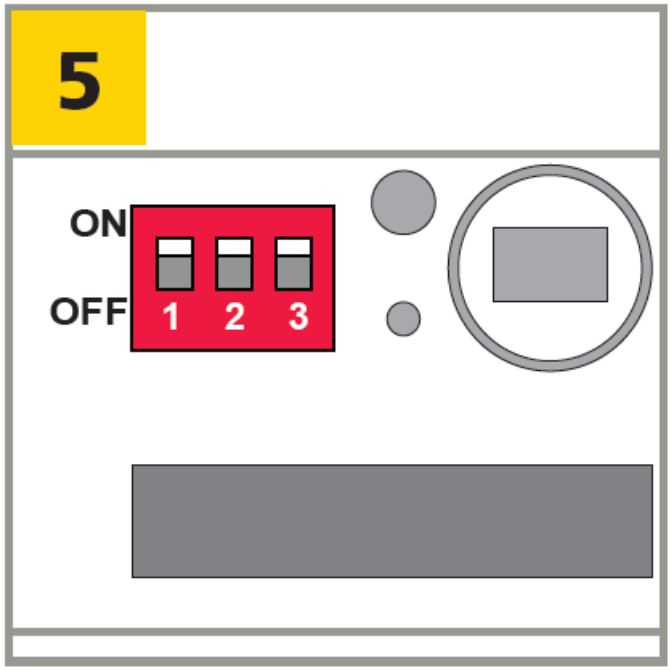


NOTES:

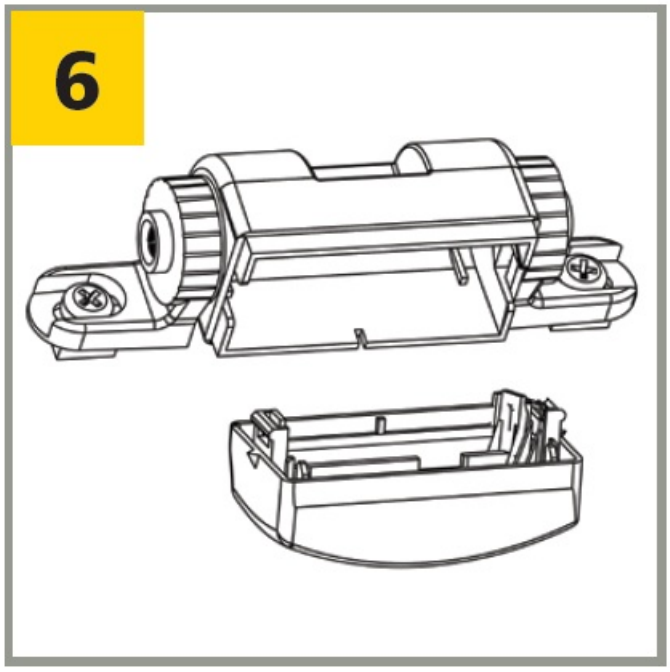
1. It is not necessary to use the mask. Installing the lens without the mask will allow maximum detection size. If using the mask, it is necessary to cut at least one segment to allow detection.



Reinstall the mask (if needed) by placing the mask inside the cover so that the legs of the mask slide into the clips. Gently work the mask's legs until it clicks.



Adjust DIP switches for application.1 See table below for DIP switch settings.



Replace the cover by matching the small tab (center of cover) to the slot in the housing, then gently push the cover until it snaps.2

DIP SWITCH	SETTING	ADJUSTMENTS*
1	Sensitivity	ON: **high** OFF: low
2	Relay Output	ON: passive output ** OFF: **active output** ***
3	Hold Time (FLY)	ON: **2 sec** OFF: 0.5 sec
	Hold Time (FLY ERT)	ON: 30 sec OFF: **15 sec**
* Factory Settings are in bold. ** Passive output: relay contact open during detection, closed during non-detection *** Active output: relay contact closed during detection, open during non-detection		

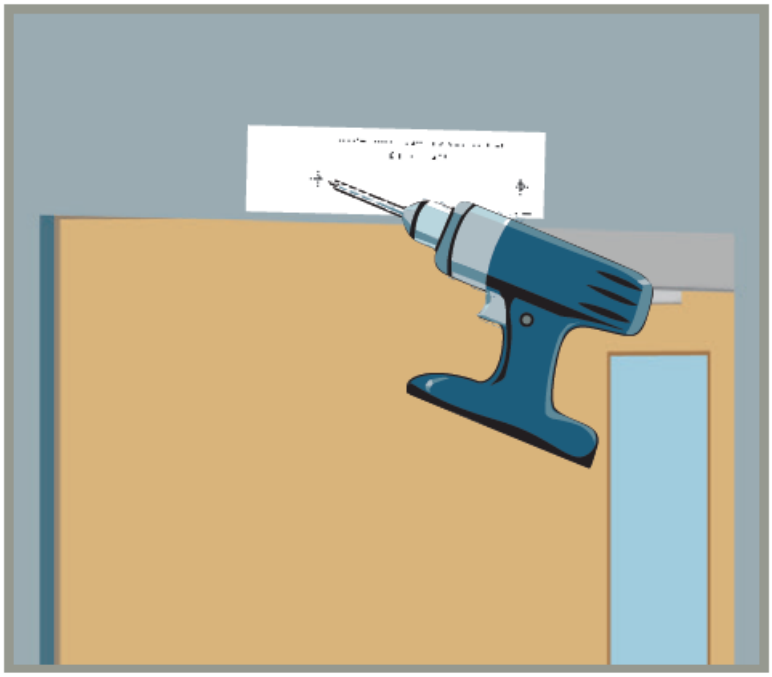
NOTES:

1. Sensitivity, relay output, and hold time can all be adjusted.
2. It is easiest to insert both legs of the cover at once and then push the two pieces together.

MOUNTING & WIRING

1. Attach template to frame above door.

2. Drill holes and pass cable through template.
3. Place sensor on template and attach using the provided screws.
4. Connect the sensor cable to the unit. Use the table provided here to ensure correct wiring. Input power is not polarity-sensitive.
5. The LED will flash for a few seconds after start-up. LED will also illuminate when the sensor detects motion.



The sensor must be secured to avoid vibrations.
Ensure no objects are present in the sensing field during set-up.

PIN	FUNCTION
1	12 – 24 V (POWER)
2	12 – 24 V (POWER)
3	RELAY COM
4	RELAY NO
5	RELAY NC

NOTES:

1. If using the Ceiling Adapter or Surface Adapter, ensure that proper mounting templates are used.

TROUBLESHOOTING

Door will not unlock. LED does not illuminate.		Sensor power is off.		Check power supply.
				Check supplied voltage.
Lock does not release upon detection, but LED illuminates.		Incorrect relay output.		Change #2 DIP switch position.
		Incorrect wiring.		Verify correct wiring.
				Replace sensor.
Size of detection field does not meet requirements		Incorrect cut-out of masking lens.		Cut a new lens to meet the required detection field size.

TECHNICAL SPECIFICATIONS	
Technology:	Passive infrared with microprocessor
Mounting Height (variable):	10’ max. (recommended 6’6” – 8’0”)
Mounting Angles:	0 – 180°
Power Supply:	12 – 24 VAC ±10% (50/60Hz) 12 – 24 VDC -10% / +30%
Current Consumption:	< 10 mA (20 mA if the relay output is activated)
Contact Rating (output relay):	1 A / 75 VDC **OR** 50 VAC potential-free contact NO/NC
Optical Characteristics:	Passive infrared with 4 elements 15 Fresnel lenses with full independent making possibilites
Warm-up TIme:	10 seconds
Response TIme:	Max. 200 microseconds
Relay Hold Time: Fly: Fly ERT:	0.5 or 2 seconds 15 or 30 seconds
Operating Temperature:	-22 – 140 °F (-30 – 55 °C)
Immunity:	Immune to electrical and radio frequency interference
Cable:	9’ four-conductor cable with 5-pin connector
Weight:	1.4 oz. (40 g)
Sensor Dimensions:	4” (L) x 1” (H) x 1.8” (W) 100 mm (L) x 25 mm (H) x 45 mm (W)
Housing Color:	Black

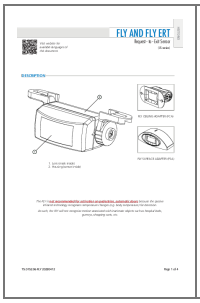
Specifications are subject to change without prior notice. All values measured in specific conditions.

BEA, INC. INSTALLATION/SERVICE COMPLIANCE EXPECTATIONS
BEA Inc., the sensor manufacturer, cannot be held responsible for incorrect installations or incorrect adjustments

of the sensor/device; therefore, BEA Inc. does not guarantee any use of the sensor/device outside its intended purpose.
BEA Inc. strongly recommends that installation and service technicians be AAADM-certifi ed for pedestrian doors, IDA-certifi ed for doors/gates, and factory-trained for the type of door/gate system.
Installers and service personnel are responsible for executing a risk assessment following each installation/service performed, ensuring that the sensor/device system performance is compliant with local, national, and international regulations, codes, and standards.
Once installation or service work is complete, a safety inspection of the system shall be performed and documented per the manufacturer's recommendations or industry guidelines. Examples of compliance may apply to ANSI 156.10, ANSI 156.19, ANSI/DASMA 102, ANSI/DASMA 107, UL294, UL325, and International Building Code.

Tech Support & Customer Service: 1-800-523-2462
General Tech Questions: techservices-us@BEAsensors.com | Tech Docs: www.BEAsensors.com

Documents / Resources

	**BEA 10FLYKITB Fly Kit Request to Exit Sensor** [pdf] User Guide 10FLYKITB Fly Kit Request-to-Exit Sensor, 10FLYKITB, Fly Kit Request-to-Exit Sensor, Request-to-Exit Sensor, Exit Sensor, Sensor