BEA
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A HALMA GROUP COMPANY

USERS GUIDE
FLY and FLY ERT

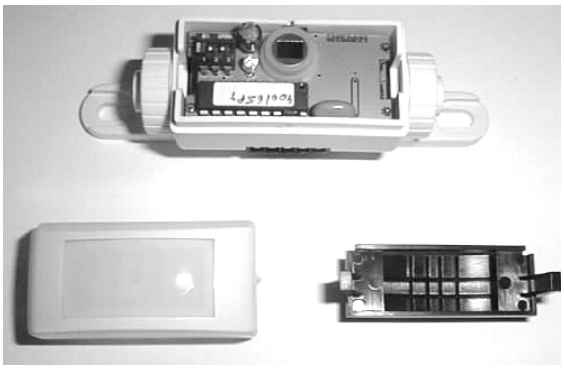
PRODUCT DESCRIPTION

The Fly (PN: 10FLYBLK, 10FLYBLKERT) is designed for use on request-to-exit applications with maglocks and electric strikes with both automatic and manual doors. The unit is a passive infrared detector that uses digital signature analysis for activation. The Fly is not recommended for activation on pedestrian automatic doors because the passive infrared technology recognizes temperature changes (i.e. body temperature) for detection. As such, the Fly will not recognize motion associated with inanimate objects such as hospital beds, gurneys, shopping carts, etc.

The key advantages of the Fly are fast detection, adjustable sensing fields, and no false detection from inanimate objects. For added relay hold time, the Fly Extended Relay Time (10FLYBLKERT) allows adjustment from 15 to 30 seconds.

COMPONENT ID

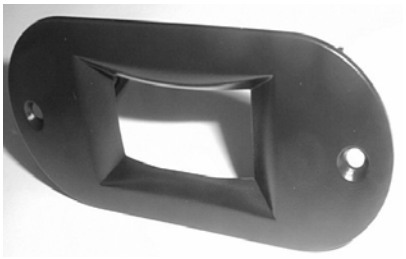
SENSOR AND HOUSING



LENS

SENSING FIELD ADJUSTMENT MASK

OPTIONAL ACCESSORIES:



FCA (Fly Ceiling Adapter)



FSA (Fly Surface Adapter)

SPECIFICATION

DESCRIPTION	SPECIFICATION
Technology	Passive infrared with microprocessor
Mounting Height - Variable	10'-0" max. (Recommended 6'-6" to 8'-0")
Mounting Angles	0 to 180°
Power Supply	12-24 VAC –10/+10% (50/60Hz) 12-24 VDC –10/+30%
Current Consumption	<10 mA (20mA 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 four elements 15 Fresnel lenses with full independent masking possibilities
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°F to +140°F (-30°C to +55°C)
Immunity	Immune to electrical and radio frequency interference
Cable	9 feet of four-conductor cable with 5-pin connector
Weight	1.4 oz. (40g)
Dimensions: Sensor	 4"L (100 mm.) x 1"H (25 mm.) x 1.8"W (45 mm.)
Housing Color	Black

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.
- Be constantly 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.

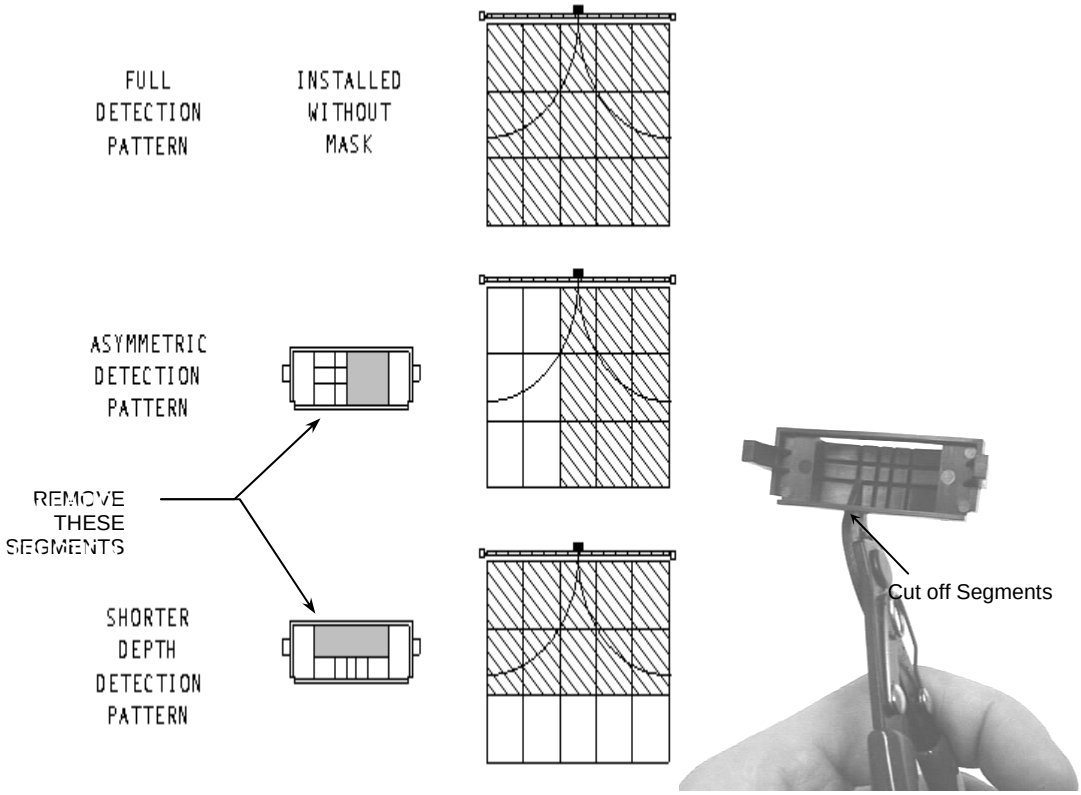
INSTALLATION INSTRUCTIONS

PREPARE THE SENSOR:

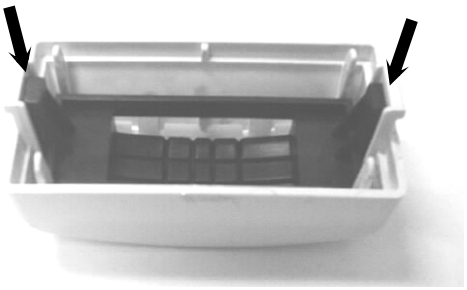
a. **Open the cover**. Insert a small screwdriver on the side of the housing (see picture) and gently pry the cover off.



b. **Adjust the sensing field** to the specific application. To adjust the field, remove segments of the lens with a diagonal cutter or a similar tool. It is not necessary to use the masking lens (installing the sensor without the mask will give the maximum detection size.) **It is necessary to cut at least one segment to allow detection.**



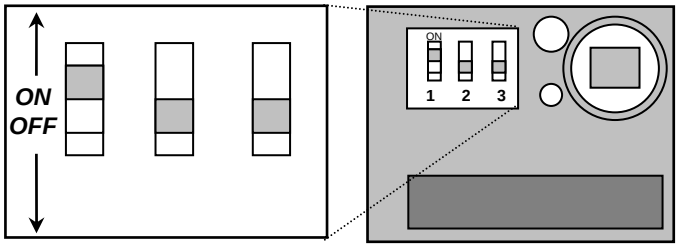
c. **Reinstall the mask** (if needed.) The mask can only by installed one way. Place the mask inside the cover so that the legs of the mask slide into the clips. Gently work the mask's legs into the cover until it clicks. Then the mask will be completely inside the cover (see picture.)



d. If the masking lens needs to be removed from the cover, pry up with a screwdriver on the small legs of the lens.



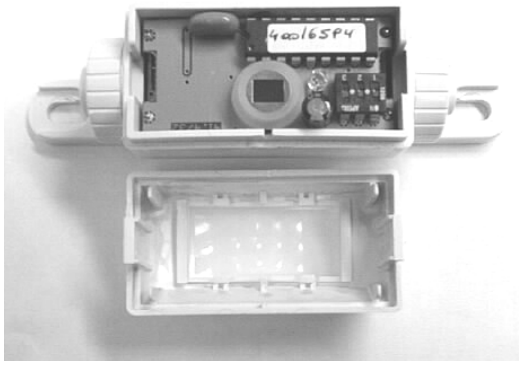
e. **Adjust the dipswitches** to match the application. The sensitivity, relay output and hold time can all be adjusted.



DIP SWITCH	SETTING	ADJUSTMENTS	FACTORY SETTING
1	SENSITIVITY	ON: HIGH OFF: LOW	HIGH
2	RELAY OUTPUT	ON: PASSIVE OUTPUT* OFF: ACTIVE OUTPUT**	ACTIVE
3	HOLD TIME (FLY)	ON: 2 sec OFF: 0.5 sec	2 sec
	HOLD TIME (FLY ERT)	ON: 30 sec OFF: 15 sec	15 sec

* Passive output: relay contact open during detection and closed during non-detection.
** Active output: relay contact closed during detection and open during non-detection.

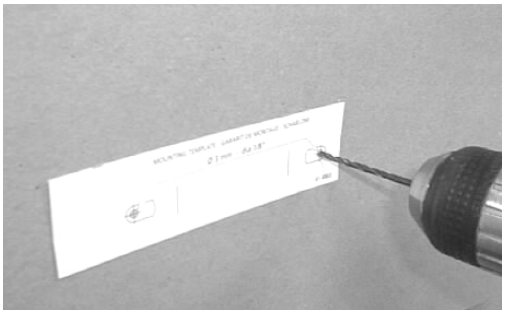
f. **Replace the cover.** The cover is keyed and may only be installed one way. Match the small tab in the center of the cover to the slot in the housing (see arrow.) Gently push the cover on until it snaps. It is easiest to insert both legs of the cover at once and then push the two pieces together.



MECHANICAL INSTALLATION

MOUNTING THE FLY

a. The sensor must be firmly fastened in order to avoid any vibrations.
b. Make sure there are no objects in the sensing field that could move.
c. Attach the template to the door.
d. Drill and pass the cable through the template.
e. Place the sensor on the template and attach with the two screws provided.



ELECTRICAL INSTALLATION & POWER ON

WIRING THE SENSOR

Connect the cable of the sensor to the unit as shown below. The connector is removable for ease of wiring. Note: The input power is not polarity sensitive.

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

USING THE SENSOR

LED SIGNAL - The LED will flash for a few seconds when the unit is started up. The LED will also light up when the sensor detects motion.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
The door will not unlock The LED does not light up	The sensor power is off	• Check the power supply • Check the supplied voltage
The door does not open if a detection occurs but the LED lights up	The relay output is not correct The wiring is not correct	• Wire the second relay output and change the #2 dip switch position • Check the wiring • Change the sensor
The size of the sensing field does not meet requirements	The cut out of the masking lens is not correct	• Cut a new lens to meet the required sensing field size

COMPANY CONTACT

If after troubleshooting a problem, a satisfactory solution cannot be achieved, please call B.E.A., Inc. for further assistance during Eastern Standard Time at **1-800-523-2462 from 7am - 5pm.**
For after-hours, call East Coast: 1-866-836-1863 or 1-800-407-4545 / Mid-West: 1-888-308-8843 / West Coast: 1-909-596-3011. DO NOT leave any problem unresolved. If you must wait for the following workday to call B.E.A., leave the door inoperable until satisfactory repairs can be made.
NEVER sacrifice the safe operation of the automatic door or gate for an incomplete solution.