

**TAKEX**

# FLAME SENSOR WITH SPEAKER

FS □ B 0 0 0 E

**HIGH SENSITIVITY  
FOR INDOOR USE**



**FLAMES DO NOT WAIT □ A WARNING MESSAGE BEFORE IT GROWS INTO □ FIRE □**

**DETECTS SMALL FLAMES IMMEDIATELY □ AN ULTRAVIOLET RAY DETECTION  
FLAME SENSOR THAT OUTPUTS WARNING MESSAGES IN DIFFERENT LANGUAGES □**

## GENERAL DESCRIPTION

Flame sensor FS-3000E quickly detects ultraviolet rays contained in flames and activates the built in message speaker.

## CONVENIENT INSTALLATION BY BATTERY

FS-3000E can be powered from either type-3 alkaline battery or optional lithium battery.

## EXTERNAL OUTPUT TO A SECURITY SYSTEM

FS-3000E does not only output a warning message but also outputs a form A (N/O) external output. It can be connected to a control panel which enables operation of other security equipments as a security system.

## 4 SELECTABLE LANGUAGES

The voice message can be selected among 4 languages. The speaker volume can be adjusted by the volume switch on the back.

## OTHER FUNCTIONS

- Compact design enables FS-3000E to be installed at any location. Easy separation of the sensor unit from the base simplifies installation and maintenance.
- The LED flashes (lights approx. 0.1 sec / approx. 5 secs.) to announce low battery condition.
- When power is turned on, 3 alarm sounds are activated. If no alarm sound is activated, check the power source.

## OPERATION SET- UP BY DETECTION TIMER

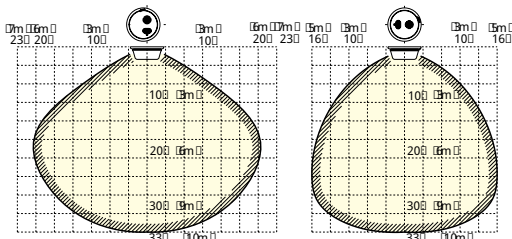
The alarm will be activated only when the sensor detects a flame (ultraviolet ray) in accordance with the detection timer. The 4 following detection times are selectable by the mode selector on the sensor body.

□ 0.2 secs., 1 sec., 6 secs., 30 secs., □

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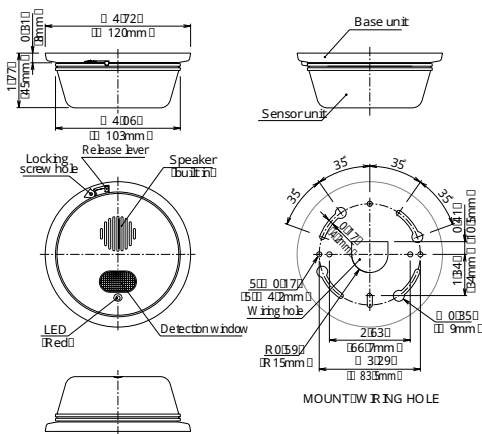
## DETECTION AREA

(FRONT VIEW : CEILING MOUNT) (SIDE VIEW : CEILING & WALL MOUNT)  
(TOP VIEW : WALL MOUNT)



CONDITION OF DETECTION AREA  
 DETECTION TIMER : 0.2 sec.  
 SIZE OF FLAME : APPROX. 2.75"(7cm)  
 ORIGIN OF FLAME : GAS LIGHTER

## EXTERNAL DIMENSIONS (Unit: inch)



## OPTIONALS

Ceiling/wall mount attachment



BCW-401

Exclusive lithium battery



CR17450E-R-2-CM2

## SPECIFICATIONS

PRODUCT NAME	FLAME SENSOR WITH SPEAKER	
MODEL NO.	FS-3000E	
DETECTION SYSTEM	Ultraviolet rays detection (Detected wave length <185 to 260nm>)	
DETECTION DISTANCE	33ft. (10m) [2.75"(7cm) flame]	
DETECTION ANGLE	Approx. 120° (conically)	
SENSITIVITY ADJUSTMENT	Detection timer (0.2secs., 1sec., 6secs., 30secs.)	
POWER SUPPLY	<ul style="list-style-type: none"> <li>Type-3 alkaline battery (LR6) □ 2(3V) . . . accessory</li> <li>Exclusive lithium battery (CR17450E-R-2-CM2) □ 1(3V) . . . optional</li> </ul>	
POWER CONSUMPTION	Stand by	70 □ A or less
	Operate	300mA or less (at max. volume of speaker activating)
BATTERY LIFE	Using type-3 alkaline battery . . . approx. 2 years (at stand by) Using exclusive lithium battery . . . approx. 5 years (at stand by)	
LED	Indication : Red LED Alarm : Flash during message output Low battery : Light on 0.1 sec. every approx. 5 secs.	
WARNING MESSAGE OUTPUT	Operation	Output warning message when detecting flames.
	Message selection	4 options
	<ul style="list-style-type: none"> <li>*English</li> <li>*Spanish</li> <li>*French</li> <li>*Italian</li> </ul>	
	Volume : Mute - max. approx. 80dB (3.3ft. <1m> from the front of speaker.)	
EXTERNAL OUTPUT	NPN open collector output 30V (DC) 50mA, one-shot operation ("ON" when outputting) Output time : Same as message output time.	
WIRING	Terminals	
AMBIENT TEMP. RANGE	14° F to 140° F (-10 □ to +60 □) without condensation Battery performance may decrease under 32° F (0 □) or beyond 104° F (40 □)	
INSTALLATION	Indoor (Ceiling or wall mount)	
WEIGHT	approx. 8.1oz (230g) including battery(accessory) 1.8oz (50g)	
APPEARANCE	ABS resin (white)	
ACCESSORIES	<ul style="list-style-type: none"> <li>Tapping screw □ 4 □ 25 □ 2 pcs.</li> <li>Sensor locking screw □ 3 □ 6 □ 1 piece</li> <li>Exclusive battery case of Type-3 □ 2 □ 1 piece</li> <li>Type-3 alkaline battery LR6 □ 2</li> </ul>	

Please Note : This sensor is designed to detect ultraviolet rays contained in flames and to initiate an alarm; it is not a fire-preventing device. TAKEX is not responsible for damage, injury or losses caused by accident, theft, Acts of God (including inductive surge by lightning), abuse, misuse, abnormal usage, faulty installation or improper maintenance.

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