

# PHOTOELECTRIC BEAM SENSOR

(TWIN BEAM)



**PB-30TK (K) / (W) · PB-60TK (K) / (W)**



Outdoor 100ft.(30m)  
Indoor 200ft.(60m)

Outdoor 200ft.( 60m)  
Indoor 400ft.(120m)



Black housing : PB-30/60TK(K)

Patent pending : 1  
Utility model registered : 1  
Utility model pending : 1  
Design registered : 1



White housing : PB-30/60TK(W)

Pole mount

## *The TAKEX “TWIN”*

*photoelectric beam is designed to meet the highest standards of quality and reliability for photoelectric beam intrusion detection. Unique twin beams are synchronized to work together to reinforce the range and stability in severe weather conditions. The system has a rotary optical system for easy installation and the special lens design aids in proper alignment.*

### HIGH RELIABILITY

Synchronized twin beams reduce false alarms caused by flying birds and falling leaves.

### EXTERNAL LIGHT PROTECTION

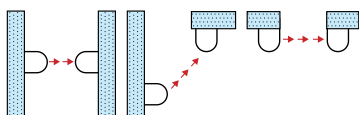
Trouble-free condition in 50,000 lx illumination fluctuation is assured by external light compensation circuit a filter, specially designed, that cuts visible rays effectively. Excellent tolerance against sun light, automobile head light, fluorescent light or mercury light.

### EASY BEAM ALIGNMENT

The special view finder allows for fast aiming and assures good alignment. Equipped with monitor jack to check sensitivity.

### ROTARY OPTICAL SYSTEM

The optical system of both the transmitter and receiver can be rotated a full 180° which allows for side aiming. Therefore the units do not have to be mounted face to face and the beam direction can not be discerned by simple observation.



### INSECT PROTECTION

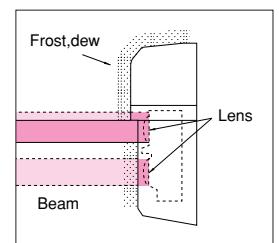
A sealed optical system prevents intrusion and interference by insects.

### OTHER FEATURES

- \* Automatic Gain Control circuit loaded
- \* Wide adjustment (horizontally  $\pm 90^\circ$ , vertically  $\pm 10^\circ$ )
- \* Two different colors housing (Black/White)

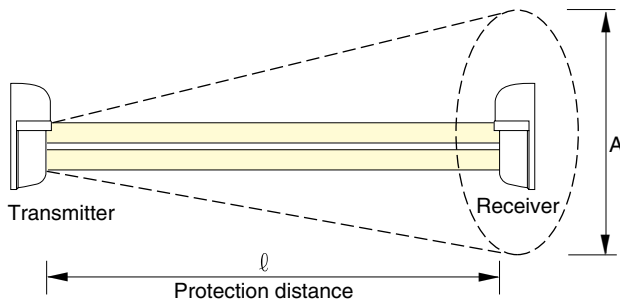
### PROTECTION AGAINST FROST/DEW

As a special hood is attached on sensor cover, beam protection continues without interruption even when the cover is screened by frost or dew.



# PHOTOELECTRIC BEAM SENSOR

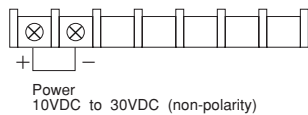
## ■ COVERAGE



PB-30TK : Outdoor 100' ( 30m)  
 Indoor 200' ( 60m)  
 PB-60TK : Outdoor 200' ( 60m)  
 Indoor 400' (120m)

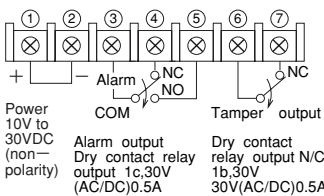
## ■ TERMINAL ARRANGEMENT

[Transmitter]



Power  
 10VDC to 30VDC (non-polarity)

[Receiver]



Power  
 10V to 30VDC (non-polarity)  
 Alarm output  
 Dry contact relay  
 output 1c,30V  
 (AC/DC)0.5A  
 Dry contact  
 relay output N/C  
 1b,30V  
 30V(AC/DC)0.5A

## ■ OPTIONAL

- Pole  
 KP-100  
 (100cm, 2pcs./set)  
 KP-150  
 (150cm, 2pcs./set)



- Pole cover (2pcs./set)  
 BP-60TE  
 (pole cap,  
 screw included)



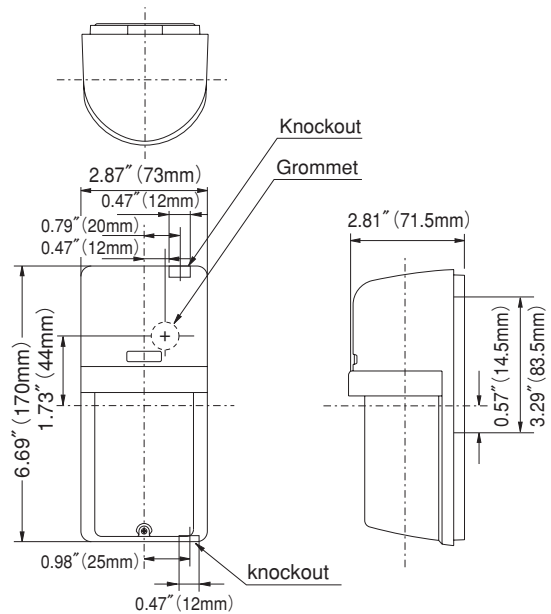
- Housing case  
 KH-120



- Pole attachment (2pcs./set)  
 BP-60A



## ■ EXTERNAL DIMENSIONS



## ■ SPECIFICATIONS

Product name	PHOTO ELECTRIC BEAM SENSOR	
Model	PB-30TK(k)/(W)	PB-60TK(k)/(W)
Detection system	Simultaneous breaking of 2 beams	
Infrared beam	LED pulsed beam, Double modulation	
Protection distance	Outdoor 100' (30m) or less Indoor 200' (60m) or less	Outdoor 200' (60m) or less Indoor 400' (120m) or less
Max. beam range (Approximation)	Outdoor 1000' (300m) or less Indoor 1000' (300m) or less	Outdoor 2000' (600m) Indoor 2000' (600m)
Response time	50msec. to 700msec. (Variable at pot)	
Supply voltage	10V to 30VDC (Non-polarity)	
Current consumption	53mA or less	80mA or less
Alarm output	Dry contact relay output form C Contact action : Interruption time + delay time ( 1 to 3 sec. ) Contact capacity : 30V AC/DC, 0.5A or less	
Tamp output	Dry contact relay N/C Action : Activated when cover is detached Contact capacity : 30V AC/DC, 0.5A or less	
Alarm LED	Red LED (Receiver) ON : when an alarm is initiated.	
Attenuation LED	Red LED (Receiver) ON : when an alarm is initiated.	
Functions	Monitor jack output, AGC circuit, Frost proof cover	
Ambient temperature range	-13°F to +140°F (-25°C to +60°C)	
Mounting positions	Indoor / Outdoor	
Wiring	Terminals	
Weight	Transmitter : 13.3oz(380g) Receiver : 14oz(400g)	
Appearance	PC resin(wine red)	

The specifications are subject to change without notice.

**Please Note :** This sensor is designed to detect intrusion and to initiate an alarm; it is not a burglary or a crime 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.

# TAKEX

### In Japan

Takenaka Engineering Co., Ltd.  
 83-1, Gojo-sotokan,  
 Higashino, Yamashina-ku,  
 Kyoto 607-8156, Japan  
 Tel : 81-75-501-6651  
 Fax : 81-75-593-3816  
<http://www.takex-eng.co.jp/>

### In the U.S.

Takex America Inc.  
 230E, Caribbean Drive  
 Sunnyvale,  
 CA 94086, U.S.A.  
 Tel : 408-747-0100  
 Fax : 408-734-1100  
<http://www.takex.com>

### In Australia

Takex America Inc.  
 Unit 16/35 Garden Road,  
 Clayton 3168 Victoria,  
 Australia  
 Tel : 03-9546-0533  
 Fax : 03-9547-9450

Takex America Inc.  
 Brisbane office : 1/50 Logan  
 Road, Woolloongabba  
 Queensland  
 4102, Australia  
 Tel : 07-3891-3344  
 Fax : 07-3891-3355

### In the U.K.

Takex Europe Ltd.  
 Takex House, Aviary Court,  
 Wade Road, Basingstoke,  
 Hampshire, RG24 8PE, U.K.  
 Tel : (+44) 01256-475555  
 Fax : (+44) 01256-466268  
<http://www.takexeuropa.com>