



2081 Craig Road

Potter Electric Signal Company
 P.O. BOX 28480, St. Louis, Mo 63146
 Phone (800) 325-3936, Fax (314) 878-7264
 Http://www.pottersignal.com

EBP-401 LONG RANGE ANNUNCIATOR SYSTEM

Installation Manual and User's Guide

Thank you for purchasing the AMSECO EBP-401 Door Annunciator System. Please read this manual thoroughly before making connections and operating the unit. Following the instructions in this manual will enable you to obtain optimum performance from the system.

Please retain this manual for future reference.

1.0 DESCRIPTION

EBP-401 is a surface mount 40 ft long range annunciator system using active infrared technology. The invisible single infrared beam triggers a pleasant chime sound when the infrared beam is interrupted. The system can be installed anywhere inside the buildings where traffic surveillance is required.

2.0 FEATURES

- * 40 feet detection range across doorway
- * Digitally generated beautiful chime sounds
- * Intelligent Microprocessor driven system for precise detections
- * Four (4) different chime sounds selectable by the user's taste
- * Two (2) Steps Volume control (High/Low)
- * Advanced circuit integrated with active-infrared beam technology.

WARNING: INSTALL THE INFRARED SENSOR at least above 2 ft. from the floor.

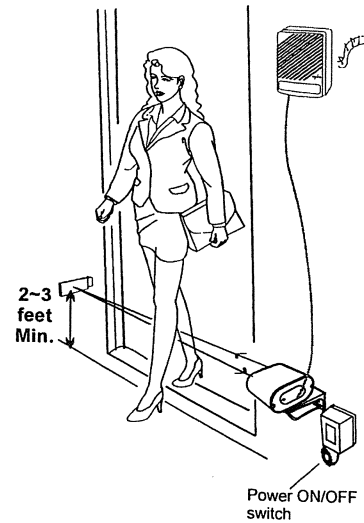
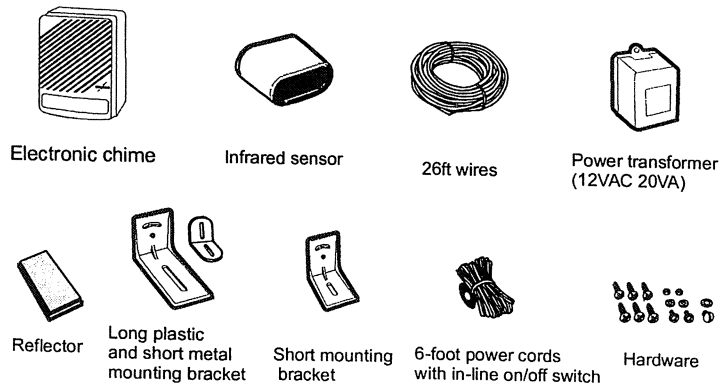


Fig. 1

3.0 COMPLETE KIT PARTS LIST

Unpack the kit box and check for the following contents.

- [1] Electronic chime
- [1] Infrared sensor
- [1] Reflector
- [1] Power transformer (12V AC 20VA)
- [1] Long plastic bracket
- [1] Metal short bracket
- [1] Short plastic bracket
- [1] 6-foot power cords with in-line Switch
- [1] 26ft 2-conductor wires
- [6] 3/4" sheet metal screws
- [1] 3/8" bolt w/locking washer
- [2] 5/8" machine screws w/washers and nuts
- [1] Manual

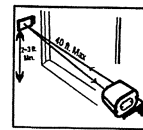
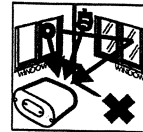
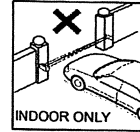


4.0 PLANNING THE INSTALLATION

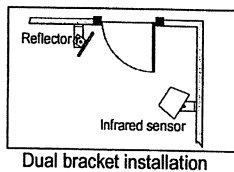
Carefully read the following instructions before beginning the installation, then carefully PLAN the installation. While the installation procedures are very simple, there are guidelines to follow to ensure that the system will operate properly. The guidelines are as follows:

Precautions:

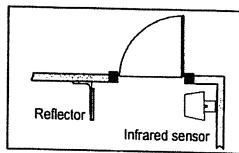
- 1) Indoor use only
- 2) THE REFLECTOR MUST FACE THE SENSOR PRECISELY.
THE SYSTEM TRIGGERS CONTINUOUS CHIMES WHEN MISALIGNED.
- 3) DO NOT mount the infrared sensor facing directly into the sun light or bright lights as it may reduce the operating distance.
- 4) The electric chime, Infrared sensors, and reflectors should be mounted onto a flat, firm surface.
- 5) The infrared sensors and reflectors should be installed at a distance not to exceeding 40ft max detection range.
- 6) DO NOT install the infrared sensor and reflector lower than 2 ft off the ground.



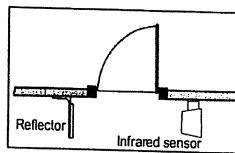
Recommended Installations



Dual bracket installation

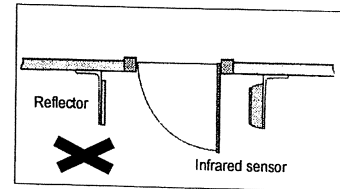


Corner mount



Single bracket installation

Improper Installation



5. INSTALLING THE INFRARED SENSOR (EBPT-401)

- 1) Plan the job first. Select suitable locations for the chime, and the sensor.
- 2) Remove the bottom screw from the chime and open the front cover. Secure the TOP mounting screw to the wall leaving some length of the screw out to hang the chime (Refer to Fig.1,2,3.). Hang the chime properly on the wall and secure the bottom screw (3/4").

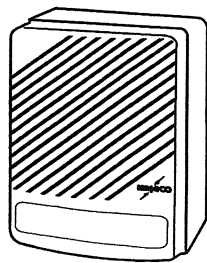


Fig.1
Screw

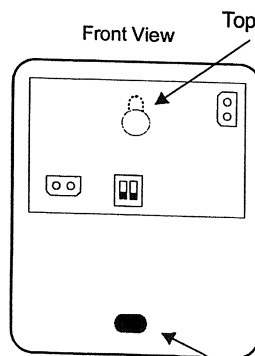


Fig.2

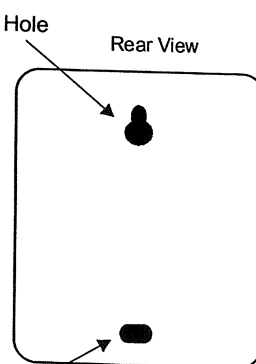


Fig.3

- 3) Remove two screws from the **SENSOR** terminal cover to access to the wiring terminal strip (Fig. 4) Locate the **AC Input** terminals, and connect the 6 ft. power cord with in-line ON/OFF switch. (Fig. 5) Secure the sensor and bracket on the wall with the lock washer and screw (Figs. 6).

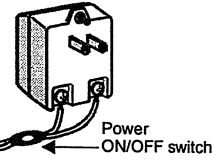
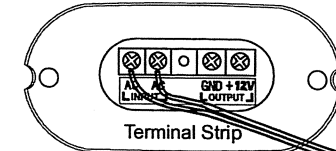
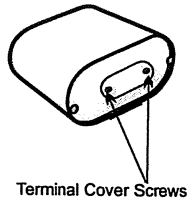
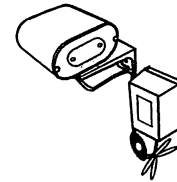
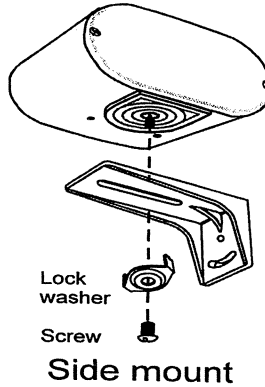
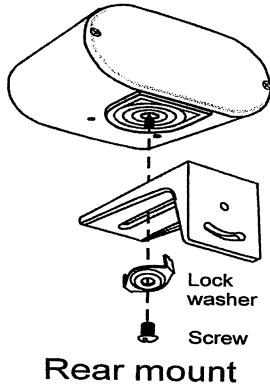


Fig. 4

Fig. 5



Note:
If necessary use cable ties to keep safely out of the way so that no one will trip over the wires.

Fig. 6

- 4) Make sure that the power Switch is "OFF", then plug the AC transformer into the 120 VAC wall outlet.

- 5) Turn "ON" the switch. Go to the opposite side of the sensor and hold the reflector aiming toward the sensor. Move the reflector up, down, right, or left until the RED alignment LED lights up in the sensor front window. Secure the reflector and bracket in place so that the alignment LED stays ON (Refer to Fig. 7). Turn the power switch "OFF" again when completed.

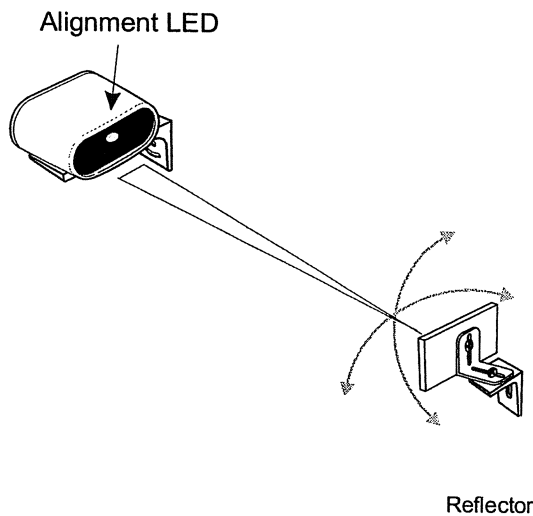
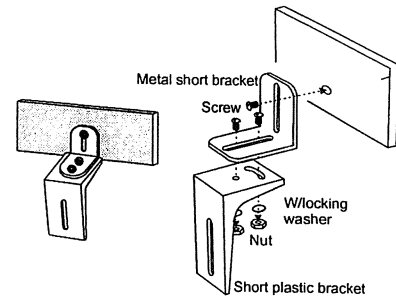
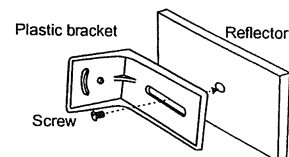


Fig. 7



Rear mount



Side mount

6) Locate +12VDC, GND connector on the chime board and make sure all wiring as per Fig. 8.

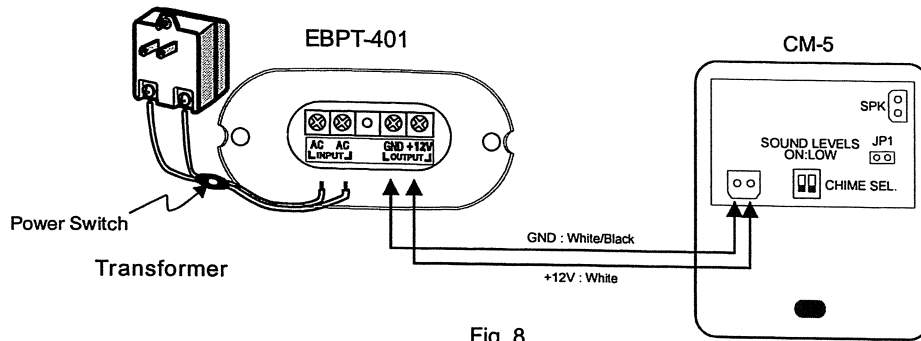


Fig. 8

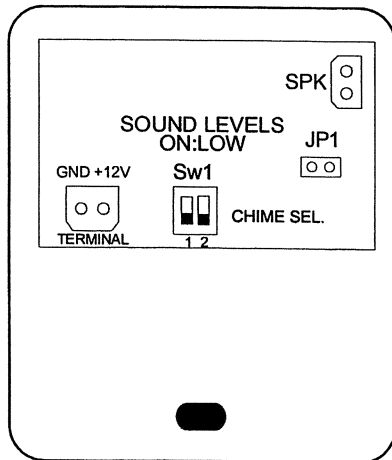
7) Turn the power switch "ON".

Trigger the Infrared sensor by walking across the beam several times. Adjust the alignment if necessary. If the system is working properly as Intended, then turn the power switch "OFF" and "ON" again once to put the alignment values into the system memory.

Note1: If the system starts chiming continually, check the alignment of sensors and re-align if necessary, then turn the power switch "OFF" and "ON" again.

Note2: The system must be restarted whenever the alignment is changed, otherwise will not work properly.

6.0 CHIME OPERATION (CM-5)



1) CHIME SOUND SELECTOR:

Sw1 is to change the announcing chime sounds.



Door Chime



Tabuler Bell



Church Bell



Vibraphone

2) JP1 is to change the chime sound level



ON - LOW
OFF - HIGH

3) TERMINAL:

+12V: +12V DC Input (Connection with EBPT-401)

GND: Ground Input (Connection with EBPT-401)

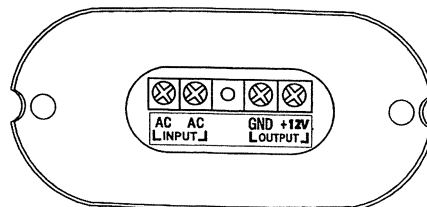
7.0 INFRARED SENSOR TERMINAL STRIP

AC : 12V AC input.

AC : 12V AC input.

GND : Ground

+12V : +12V DC OUTPUT(3 Sec.)



8.0 INFRARED SENSOR MAINBOARD

JP1: Infrared beam interception warning

Selectable Jumper: OFF / 10 sec. / 60 sec.

When the infrared beam is blocked for 10 seconds (factory setting) the system will generate continuous chime sounds. The jumper can adjust the lengths of time of blocking to trigger the warning.

Refer to jumper settings below for adjustment.



OFF

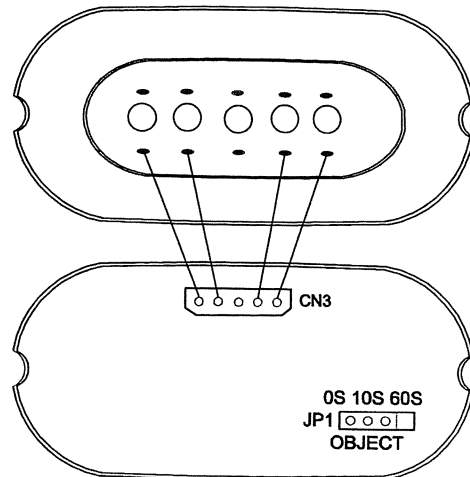


10sec.

Factory
Setting



60sec.



View from Component side

9.0 TROUBLESHOOTING

Problem	Probable Cause	Solution
The chime does not sound when the infrared beam is interrupted.	1. The power may be off.	Turn the receiver power switch ON.
The chime sounds continuously	1. The infrared beam is blocked. 2. The sensor and the reflector may be misaligned.	Clear the infrared beam pathway. Re-check the alignment.

10.0 SPECIFICATIONS :

Part No./Model	EBP-401
Description	Long Range Wired Annunciator System & Chime
Detection method	Active Infrared
Detection Range	40ft.
Max. transmission Range	1000ft. AWG#22 2P WIRE
Power Source	Sensor : 12V AC/DC, 20VA Chime : 12V DC, 10VA
Power Consumption : Stanby	Sensor : 50mA Chime : 100mA
: In alarm	Sensor : - Chime : 500mA.
Volume Level	80db(Low) ~ 95db(High)
Chime Sounds selection	Selectable among 4 sounds by a dip SW
Chime Sounds level selection	JP1(Jumper SHORT LOW Jumper OPEN HIGH)
Response Time	4m Sec.
Light Source	Infrared pulse beam 950mm
Installation location	Indoor
Infrared Beam Interception Warning	Sensor : JP1 selectable OFF / 10 sec / 60 secretary
Install Setting	Transformer Power On→ Red alignment LED ON→Transformer Power OFF→Transformer Power On→ Setting
Power switch	Yes
Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Weight Dimension : (WxHxD)	Sensor : 125g Chime : 164.4g Sensor : 2-1/2"x1-7/8"x3-7/16" Chime : 4-7/8"x3-1/2"x1-3/8"
Total Weight(w/box)	