

## Operational Checklist

This Pre-Installation Checklist is designed to help guide and assure the installation of the Optex PE beams to correctly setup and align properly. This guide will also verify the proper dip-switch setting (e.g. Low Battery, Channel Frequency, Beam Interruption etc.)  
 If after all steps have been conducted properly and operation has not been achieved, please contact our technical support team for further assistance at 1-800-966-7839

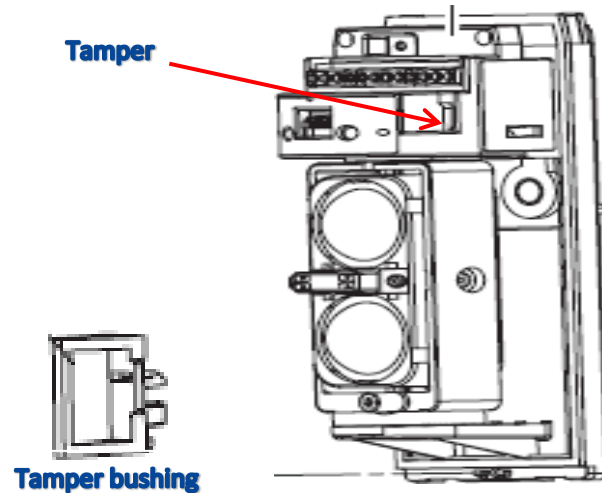
**Note: This is not a substitute for the installation manual**

### STEP 1.

Apply power to the beams using the LSH20 lithium batteries provided.

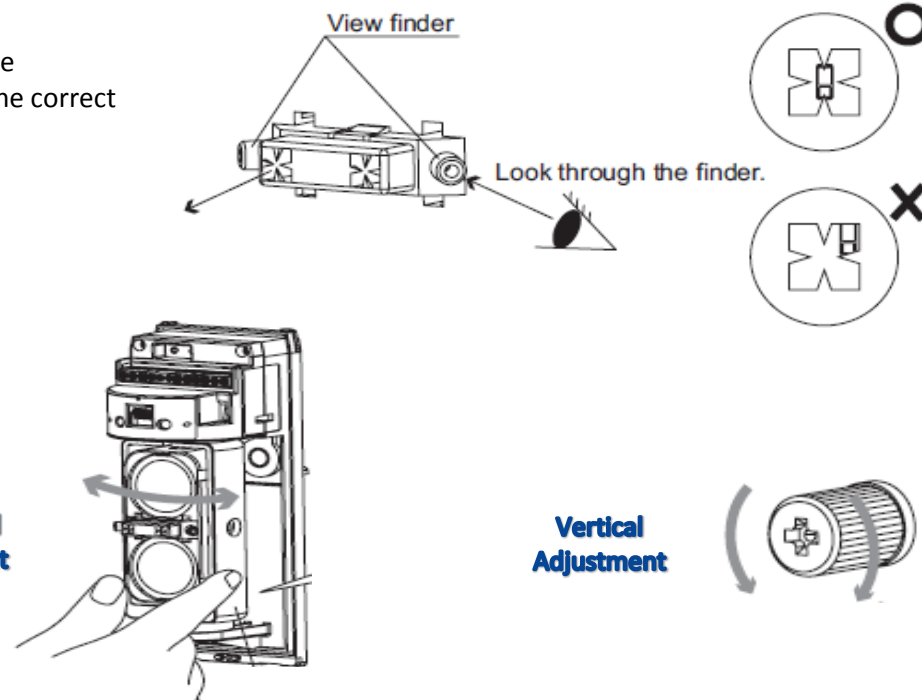
Be sure the tamper switch is in the open state. This enables the alignment mode.

Do not insert the tamper bushing until all steps are finished.



### STEP 2.

Visual alignment  
 This step allows the beams to look in the correct direction.

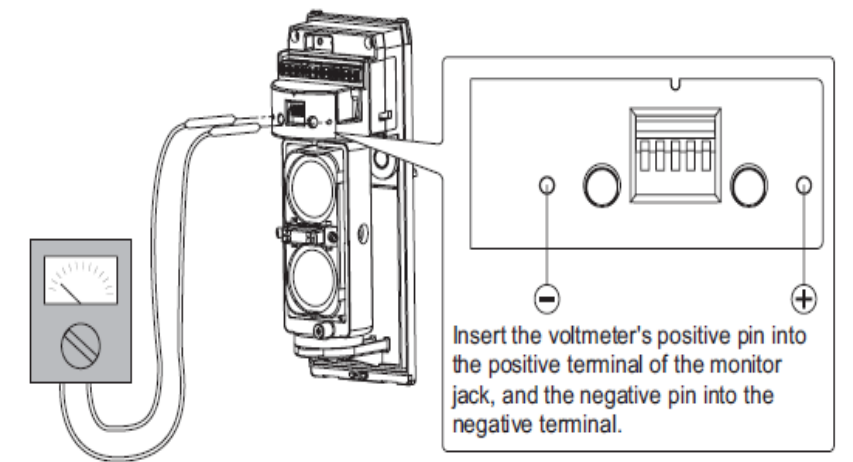


### STEP 3.

Fine tuning the beam requires a digital multimeter (DMM) and is conducted at the receiver.

Insert the DMM probes into the the receiver's monitor jack (MJ).

Set the DMM to DC volts at a range of 2~10VDC



If your DMM has a reading lower than 2.5VDC. Leave the DMM connected and follow step 2 again.

As you make the adjustments watch the DMM to see if the voltage increases or decreases. If it decreases turn or rotate the beam the opposite direction. You should be able to reach 3VDC.

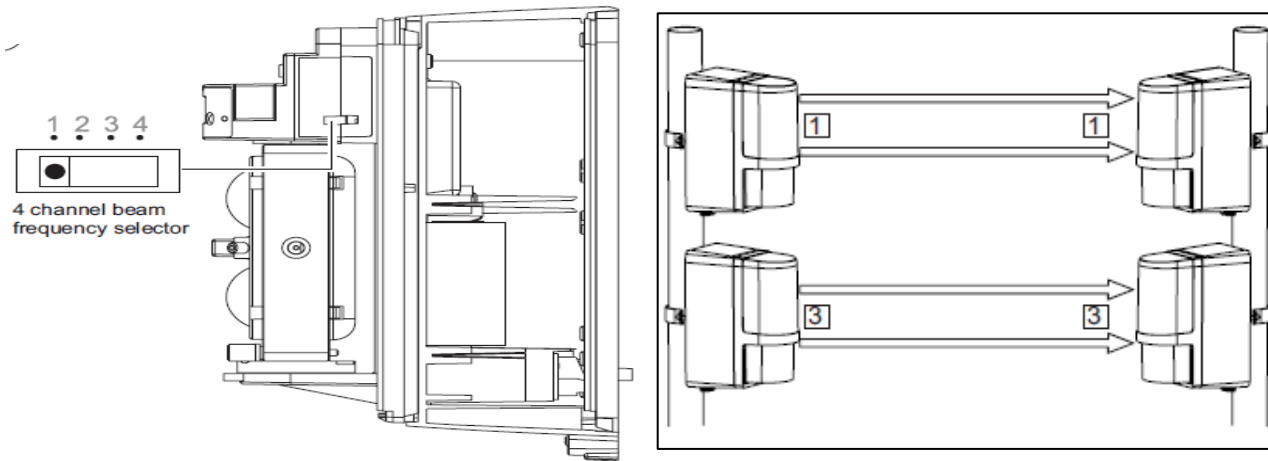
Alarm indicator LED	Light interrupted	Light received			
	ON (Red)	Fast flicker	Slow flicker	OFF	
Adjustment level	Realign		Fair	Good	Excellent
Monitor jack output	0V	▷	1.0V ▷ 2.0V ▷ 2.5V ▷		

**CAUTION**

The alarm indicator LED is a supporting tool for easy alignment. Be sure to perform the fine alignment to ensure maximum output level through the monitor jack.

## NOTE:

In applications that call for the beams to be double-stack, set the frequency selector switch in the appropriate position. Beam must be 2 channels spaced from one another. This will prevent beam frequency crosstalk.



After Optical Alignment has been completed make sure to double check the Dip-Switch settings to fit the needs for your application.

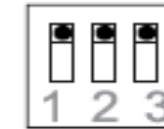
Refer to the installation manual for better understanding of each setting.

### Receiver:



- 1,2: Beam interruption adjustment switch
- 3: Battery saving timer switch
- 4: Intermittent output function switch
- 5: N.C./N.O. selection switch

### Transmitter:



- 1: Battery saving timer switch
- 2: Intermittent output function switch
- 3: N.C./N.O. selection switch

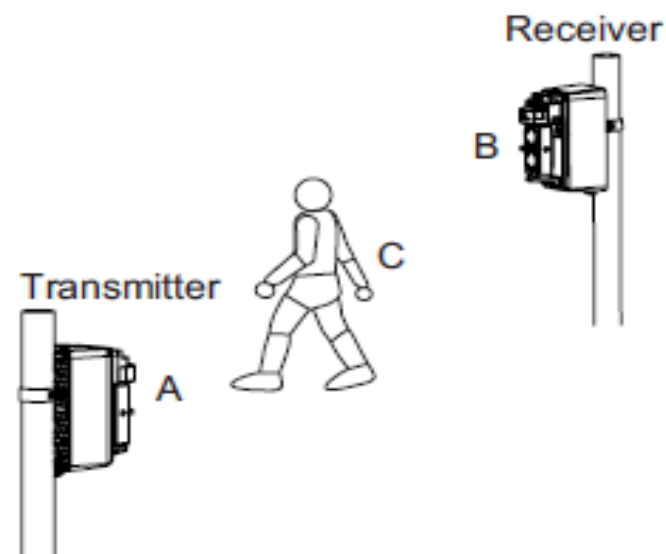
To conserve battery life, place the tamper bushing inside beam tamper. This disables alignment mode and turns off LED indicators.

## Step. 4

Conduct a walk test to check that the alarm indicator LED on the receiver turns ON as beam is interrupted.

Be sure to walk test the following three points.

- A. In front of the Transmitter
- B. In front of the Receiver
- C. At the mid point between the Transmitter and Receiver.



After completing the settings and operation check, insert the tamper bushing into each transmitter/receiver.

