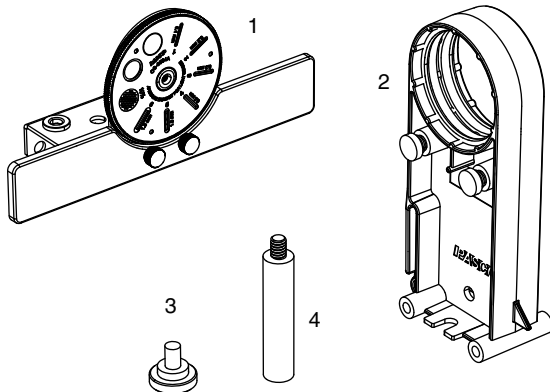


# Aperture Bracket

OS-8534A



## Included Parts

1. Bracket with aperture disk and removable screen
2. Holder with (2) thumbscrews
3. Thumbscrew for attaching light sensor
4. Aperture Bracket Handle

## Additional Part Required

- PASPORT or *ScienceWorkshop* light, UV, IR, or broad-spectrum sensor.

## Introduction

The Aperture Bracket acts as a mask and holder for a light sensor. By rotating a disk, you can select various apertures to control the sensor's spatial resolution and the amount of light entering the sensor. A removable screen displays light cast to the left and right of aperture. The Aperture Bracket also allows a light sensor to be mounted on the included holder, so that the sensor can be used on a PASCO Basic Optics bench.

## About the Apertures

### Slit Apertures

The six slit apertures are typically used when scanning the sensor across a spectrum or a diffraction pattern. Select a wider slit to allow more light into the sensor or a narrower slit to improve the spatial resolution. The approximate widths of the apertures are 0.1 mm, 0.2 mm, 0.3 mm, 0.5 mm, 1.0 mm, and 1.5 mm.

### 10% Screen

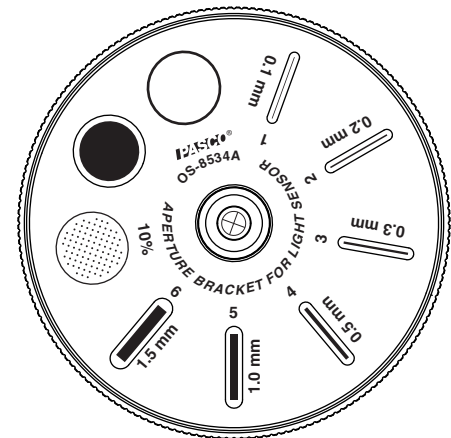
The small holes in the screen allow approximately 10% of incident light through to the sensor.

### Circular Aperture

This aperture is approximately 8 mm in diameter. It allows the maximum amount of light through to the sensor.

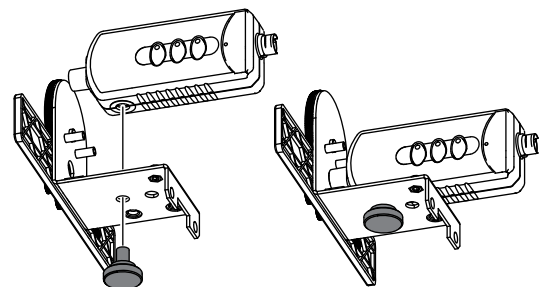
### Translucent Screen

The translucent screen allows the sensor to measure illuminance, for instance when demonstrating the inverse-square law. The screen is approximately 8 mm in diameter.

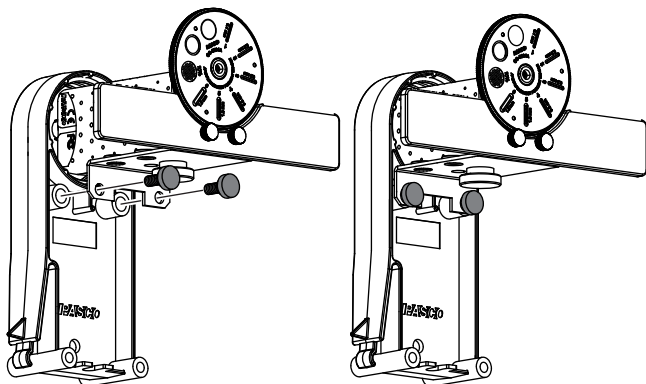


## Assembly

1. Use the thumbscrew to fasten the sensor to the bracket as illustrated.

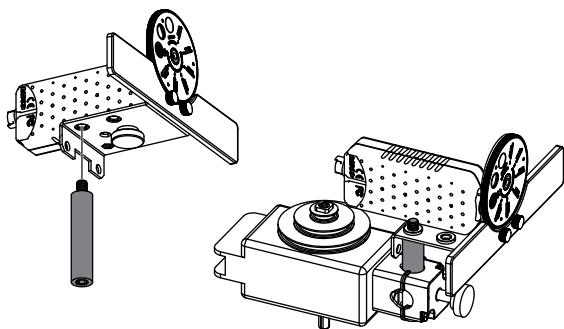


- Turn the disk to select the desired aperture. The aperture in use is in the lowest position.
- (Optional) Attach the bracket to the included component holder as illustrated.



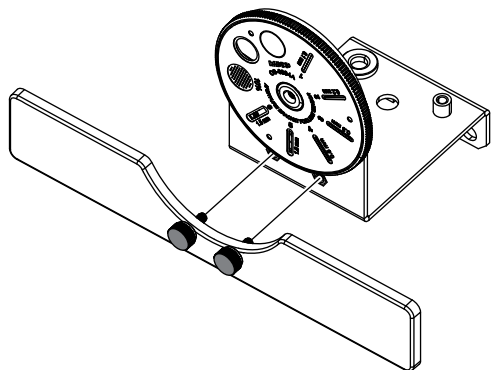
## Attaching the Bracket to a Rotary Motion Sensor

- Screw the included post into the bracket as illustrated.
- Secure the post in the clamp of a Rotary Motion Sensor.



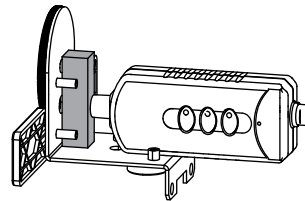
## Removing the Screen

Loosen the two thumbscrews on the screen to remove it. The captured thumbscrews remain loosely connected to the detached screen.



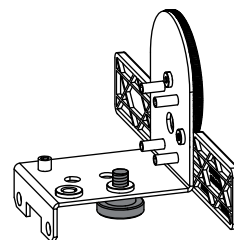
## Using the Bracket with a Cuvette

To hold a cuvette (such as PASCO part SE-8739) in front of the sensor, fasten the sensor to the Aperture Bracket as illustrated, and place the cuvette between the sensor and the disk.



## Screw Storage

When the thumbscrew is not in use, screw it into the storage location as illustrated.



## Technical Support

For assistance with any PASCO product, contact PASCO at:

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10101 Foothills Blvd.  
Roseville, CA 95747-7100

Phone: 916-786-3800 (worldwide)  
800-772-8700 (U.S.)

Fax: (916) 786-7565

Web: [www.pasco.com](http://www.pasco.com)

Email: [support@pasco.com](mailto:support@pasco.com)

**Limited Warranty** For a description of the product warranty, see the PASCO catalog.

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