

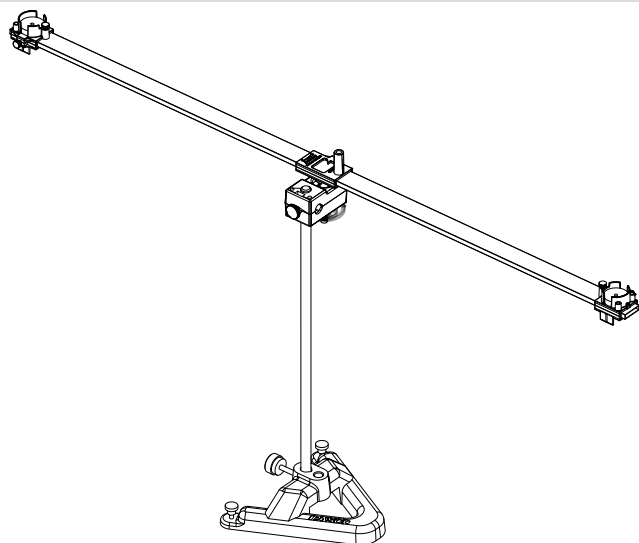
# Meter Stick Rotation Components

ME-7072

## Introduction

The Meter Stick Rotation Components are used to create a rotating platform out of a half-meter stick mounted to a rod. Masses can be attached at any location on the meter stick. The half-meter stick can be rotated about any point. A force sensor can be attached to the center post to perform centripetal force experiments.

**NOTE:** A full-length meter stick should not be used, as it is difficult to keep out of the way of a rotating meter stick.



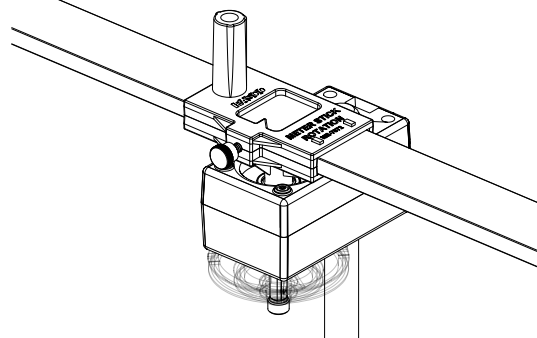
### Recommended equipment:

- Wireless Smart Gate (PS-3225)
- Wireless Force Acceleration Sensor (PS-3202)
- Wireless 3-Axis Acceleration/Altimeter (PS-3223)
- Super Pulley with Mounting Rod (ME-9499)
- Multi-Clamp (ME-9507)

## About the equipment

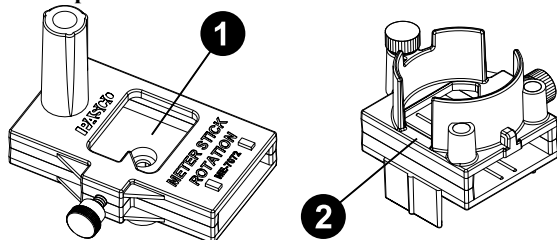
### Meter stick holder

The meter stick holder is used to attach the half-meter stick to the mounting rod. The holder is designed to slide onto the shaft of either a Pivot (ME-7034) or a PASPORT Rotary Motion Sensor (PS-2120A), allowing it and the attached half-meter stick to rotate freely. To secure the holder in place, remove the screw on the underside of the holder and screw it into the hole over the axis of rotation. The holder includes a small triangular pointer which can be used to position the rotation axis at the desired mark on the half-meter stick.



## Components

### Included components:



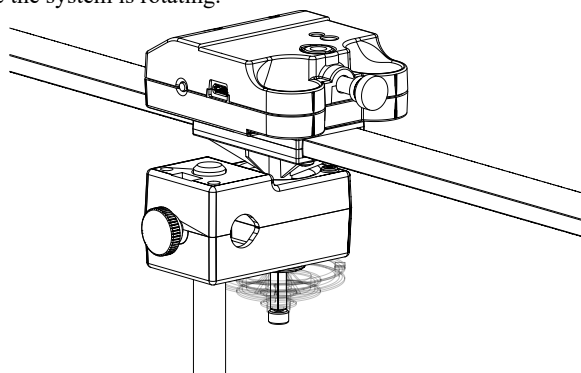
- 1 Meter stick holder
- 2 2x mass holders

### Required equipment:

- Pivot (ME-7034) or PASPORT Rotary Motion Sensor (PS-2120A)
- Small "A" Base with Feet (ME-8989) or equivalent rod and base with leveling feet
- Half-Meter Stick (ME-7044) or equivalent
- Masses from Mass and Hanger Set (ME-8979), 20 g Replacement Mass Set (ME-8983), or 50 g Replacement Mass Set (ME-8984)
- Stainless Steel Rod, 45 cm (ME-8736)

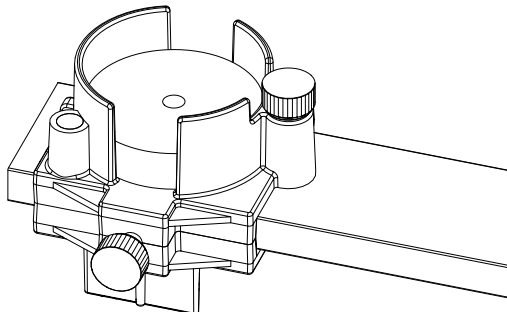
**NOTE:** The Wireless Rotary Motion Sensor (PS-3202) *cannot* be used with this product, as its shaft does not allow it to be connected to both the pulley and the meter stick holder simultaneously.

While the meter stick holder is mounted on the Pivot or Rotary Motion Sensor, a Wireless Force Acceleration Sensor (PS-3202) can be mounted on top of the meter stick holder. This will allow for direct measurement of the centripetal force experienced by the mass holders while the system is rotating.

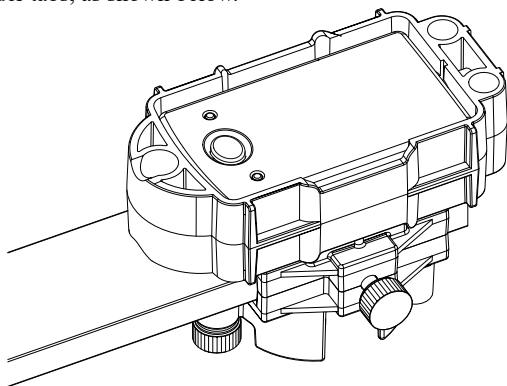


## Mass holders

The mass holders each have a mass of 20 g and are used to attach additional masses to the half-meter stick. Each mass holder can hold a maximum of one 100 g mass or two 50 g masses. Each holder features two adjustable thumbscrews: one perpendicular to the half-meter stick, which is used to fix the holder and its masses in place on the stick, and one parallel to the half-meter stick, which is used for securing a string from the holder to a Wireless Force Acceleration Sensor.



The underside of each mass holder features two vertical tabs. When the mass holders are installed on the half-meter stick upside-down, these tabs can be used to attach a Wireless 3-Axis Acceleration/Altimeter (PS-3223) to the mass holder by sliding the Acceleration case onto the mass holder tabs, as shown below.



## Specifications and accessories

Visit the product page at [pasco.com/product/ME-7072](https://www.pasco.com/product/ME-7072) to view the specifications and explore accessories. You can also download experiment files and support documents from the product page.

## Experiment files

Download one of several student-ready activities from the PASCO Experiment Library. Experiments include editable student handouts and teacher notes. Visit [pasco.com/freelabs/ME-7072](https://www.pasco.com/freelabs/ME-7072).

## Technical support

Need more help? Our knowledgeable and friendly Technical Support staff is ready to answer your questions or walk you through any issues.

- Chat [pasco.com](https://www.pasco.com)
- Phone 1-800-772-8700 x1004 (USA)  
+1 916 462 8384 (outside USA)
- Email [support@pasco.com](mailto:support@pasco.com)

## Limited warranty

For a description of the product warranty, see the Warranty and Returns page at [www.pasco.com/legal](https://www.pasco.com/legal).

## Copyright

This document is copyrighted with all rights reserved. Permission is granted to non-profit educational institutions for reproduction of any part of this manual, providing the reproductions are used only in their laboratories and classrooms, and are not sold for profit. Reproduction under any other circumstances, without the written consent of PASCO scientific, is prohibited.

## Trademarks

PASCO and PASCO scientific are trademarks or registered trademarks of PASCO scientific, in the United States and in other countries. All other brands, products, or service names are or may be trademarks or service marks of, and are used to identify, products or services of, their respective owners. For more information visit [www.pasco.com/legal](https://www.pasco.com/legal).