

# MOTION+ TRACK & ACCESSORIES

## W54TRACK

### USER GUIDE



[cma-science.nl](http://cma-science.nl)

## Short description

CMA Motion+ Track & Accessories Set provides a solid base for setting up experiments with Motion+ carts. It helps you to create simple, accurate setups for motion investigations. The set includes the track and several accessories:

- Two-leg stand,
- Single-leg end stop,
- Adjustable end stop,
- Pulley bracket,
- Pulley,
- Rod clamp (2)
- 250 g mass (2).

## Track

The low-friction metal track is 1.2 m long and has a metal scale attached.



## Two-leg stand

The two-leg support serves as a foot for one side of the track. It slides into the end of the track, with the nut fitting into the center slot on the underside. By turning the bolts on either side, the track can be set to the desired height.





### Single-leg end stop

The single-leg end stop serves as both a support and an end stop. It slides into the end of the track, with the nut fitting into the center slot on the underside. The track height can be adjusted by turning the bolt.



## Adjustable end stop

The adjustable end stop prevents carts from rolling off the track. It slides into the track end and can be secured in place with a bolt for precise positioning. Magnets (included with Motion+ carts) can be inserted into the stop's plugs to repel the magnets installed in the cart.



## Pulley

The pulley consists of a very low-inertia rotating shaft with 10 spokes. It has a V-shaped groove that guides a string with a weight, allowing the force to change direction through the pulley.



## Pulley bracket

The pulley bracket secures the pulley at the end of the track. It slides into the track end and can be fixed in place with a bolt. The pulley is attached to the bracket using the bolt, and its height can be easily adjusted for your experiment.



## Rod clamp (2)

The rod clamp is used to support the track with a user-supplied stand. Insert the rod clamp nut into the side of the track and position it as needed. Then insert a rod into the clamp's hole and secure it with the bolt at the desired height. For better stability, you can repeat the same setup on the other side of the track with another stand.



## Mass (2)

The two 250 g masses are used to increase the cart's weight. To attach a mass, remove the wing nut and bolt from the mass, place the bolt head in one of the off-center slots on top of the cart, slide the mass onto the bolt, and then secure it with the wing nut.



**Warranty:**

Motion+ Track & Accessories W54Track is warranted to be free from defects in materials and workmanship for a period of 36 months from the date of purchase provided that it has been used under normal laboratory conditions. This warranty does not apply if the sensor has been damaged by accident or misuse.



**Note:** *This product is to be used for educational purposes only. It is not appropriate for industrial, medical, research, or commercial applications.*

Rev. 15/12/2025