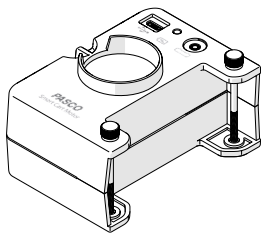


## Quick Start Guide



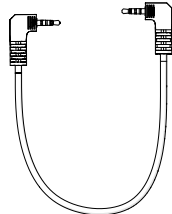
**NOTE:** Additional information on how to use the Smart Cart Motor can be found in the PASCO Capstone and SPARKvue Help systems.

012-16646A

## What's Included



Smart Cart Motor



Smart Cart Accessory Cable

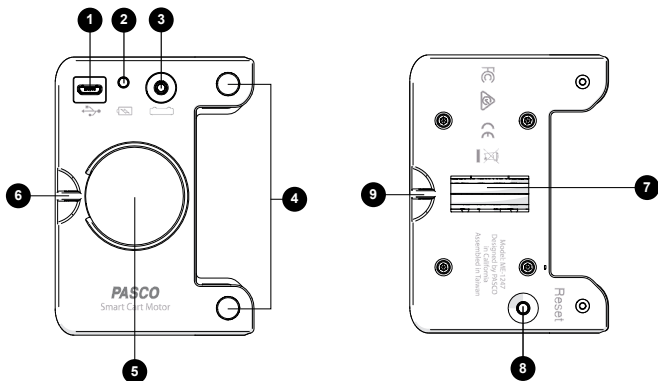


USB Cable

## Required Equipment

- Smart Cart (ME-1240 or ME-1241)

## Features



### 1 USB port

For connecting a USB cable to charge the battery.

### 2 Battery Indicator Light

Red blink	Low charge
Green solid	Full charge
Yellow solid	Charging

### 3 Smart Cart Accessory Port

For connecting the motor to a Smart Cart.

### 4 Thumbscrews

For mounting the motor to a Smart Cart.

### 5 Mass Holder

For inserting a mass to provide more traction.

### 6 Upper String Tie

For attaching a string to pull various objects.

### 7 Wheel

Drives the Smart Cart Motor.

### 8 Reset Button

Press and hold for 10 seconds if malfunctioning.

### 9 Lower String tie

For attaching a string to pull various objects.

## Charge the Battery

This device contains a rechargeable battery that lasts an entire school day when fully charged. Charge the battery before using the device for the first time since it is not shipped with a full charge.

To charge the battery:

- Connect the device to any standard USB charger or powered USB port using the included USB cable.

The battery indicator light will be solid yellow while the battery is charging and will change to solid green when the battery is fully charged.

## Install or Update Software

The latest update of PASCO Capstone or SPARKvue is required to use this device. Download the software at one of the locations provided below. If you have previously installed the software, a notification will appear if an update is available.



### Windows and macOS

Go to [pasco.com/capstone](http://pasco.com/capstone) then click Downloads.



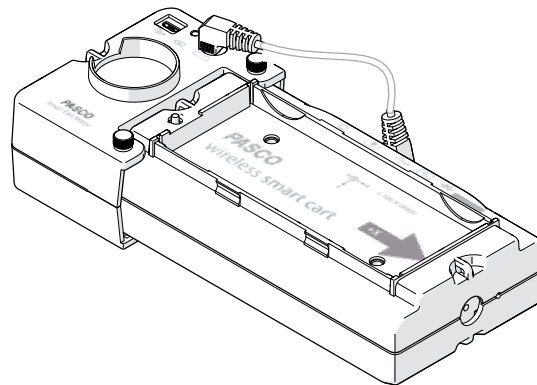
### Windows and macOS

Go to [pasco.com/sparkvue](http://pasco.com/sparkvue) then click Downloads.

### iOS, Android, and Chromebook

Search for SPARKvue in your device's app store.

## Attach to a Smart Cart



The Smart Cart Motor attaches to the back of the Smart Cart and is held in place with two thumbscrews. To attach the motor to a Smart Cart:

- Push the plunger on the Smart Cart all the way in.
- Place the Smart Cart Motor on the back of the Smart Cart, aligning the thumbscrew holes on the motor with the accessory holes on the cart.
- Insert each thumbscrew into the holes and turn until finger tight.
- Connect the Smart Cart Accessory cable to the Smart Cart Motor accessory port and the other end to the Smart Cart accessory port.

When not in use, store the thumbscrews in the Smart Cart Motor threaded holes to prevent losing the screws.

## Connect to Software

1. Power on the Smart Cart.
2. Open Capstone or SPARKvue then:



Click Hardware Setup.



Click Sensor Data.



3. Select the device that matches the ID labeled on your cart.

**IMPORTANT:** When the device is connected to the software, you may receive a notification to install a firmware update. Click Yes to update the firmware.


## Control the Motor

The on/off state and speed of the motor are set using a control panel in PASCO Capstone or SPARKvue.


**NOTE:** You must first connect the motor to a Smart Cart and connect the Smart Cart to software to access the control panel.

### Access the Control Panel



Click Smart Motor  in the Tools palette.

**NOTE:** If on the Sensor Data Configuration screen, click Cancel to return to the Choose a Path screen.

1. On the Choose a Path screen, click Build New Experiment.
2. Select any layout.
3. Select the Smart Cart Motor Display .

### Power the Motor On and Off

Do either of the following to power the motor on or off:

- Click the On and Off buttons.
- Select the Auto checkbox. The motor will automatically power on when recording data and power off when data collection stops.

### Set the Speed and Direction

Do either of the following to set the speed and direction of the motor:

- Enter a value between -100 and +100 in the Power text box.
- Click and drag the Power slider between -100 and +100.

### Additional Control Methods

You can also control the motor by using the following methods listed below. Detailed directions on how to use these methods can be found in the Capstone or SPARKvue Help system.

- Blockly Programming
- Calculation (Capstone only)
- Start and Stop Conditions (Capstone only)

## Additional Resources

### Experiments


Print-ready experiment worksheets for this product are available to download from the PASCO website. Go to [pasco.com/freelabs](http://pasco.com/freelabs) and enter ME-1247 to access all experiments related to this product.

### Software Help

Additional information on how to use this device can be found in the PASCO Capstone and SPARKvue Help systems. To access the help:



In the menu bar, click Help then select PASCO Capstone Help.

Click the Main menu  then select Help.

## Technical Support

Contact PASCO Technical Support for assistance with this or any other PASCO product.

Address	PASCO scientific 10101 Foothills Blvd. Roseville, CA 95747-7100
Phone	1-800-772-8700 (USA) 1-916-462-8384 (International)
Chat	<a href="http://www.pasco.com">www.pasco.com</a>
email	<a href="mailto:support@pasco.com">support@pasco.com</a>

## Regulatory Information

### Product End of Life Disposal Instructions



This electronic product is subject to disposal and recycling regulations that vary by country and region. It is your responsibility to recycle your electronic equipment per your local environmental laws and regulations to ensure that it will be recycled in a manner that protects human health and the environment. To find out where you can drop off your waste equipment for recycling, please contact your local waste recycle or disposal service, or the place where you purchased the product.

The European Union WEEE (Waste Electronic and Electrical Equipment) symbol and on the product or its packaging indicates that this product must not be disposed of in a standard waste container.

### Battery Disposal Instructions

Batteries contain chemicals that, if released, may affect the environment and human health. Batteries should be collected separately for recycling and recycled at a local hazardous material disposal location adhering to your country and local government regulations. To find out where you can drop off your waste battery for recycling, please contact your local waste disposal service, or the product representative. The battery used in this product is marked with the International symbols to indicate the need for the separate collection and recycling of batteries.

### CE Statement

This device has been tested and found to comply with the essential requirements and other relevant provisions of the applicable EU Directives.

### FCC Statement

This Class A digital device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Warranty, Copyright, and Trademarks

### Limited Warranty

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

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