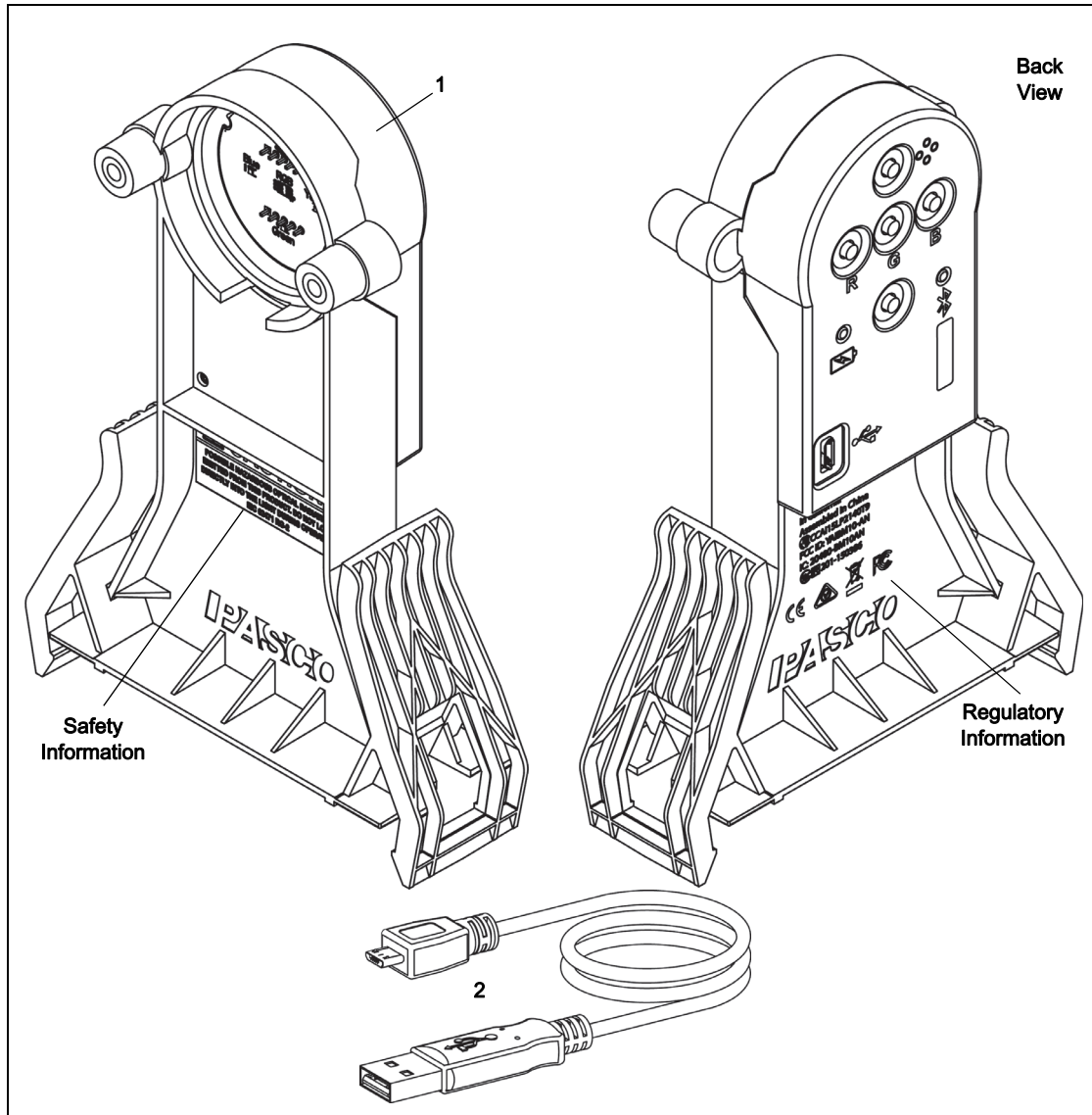


Wireless Light Source

EP-3560



Included Equipment	Item	Included Equipment	Item
Wireless Light Source	1	USB-to-Micro-USB Cable	2
USB Single Port Charger (PS-2575)*	(*Not shown. See next page.)		

Introduction

This Wireless Light Source is a versatile light-emitting-diode (LED) light source that can be used either as a stand alone unit or, in the future, as a wireless unit connected via Bluetooth to a computing device such as a tablet or computer.

The Light Source LEDs produce four different colors. The center “RGB Lens” allows red, green, or blue to be viewed separately, or viewed together to produce combinations of colors, including white. The Light Source LEDs have three sequential levels of intensity (low to medium to high).

The Light Source is designed to be mounted on the top of a PASCO track.

Included Items

The included one-meter long cable has a “Micro-B” type plug at one end and a Type A plug at the other end.

The PS-2575 Single Port USB Charger includes a power adapter and four interchangeable plugs.

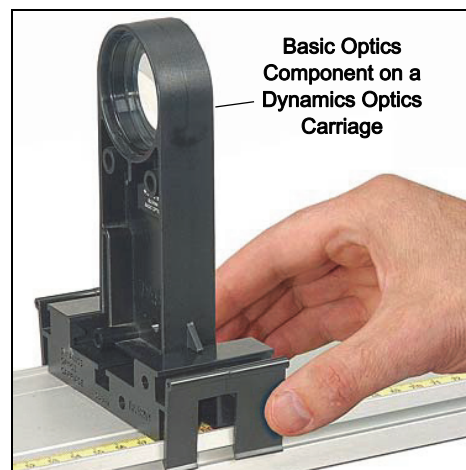


Recommended Items

- PASCO Wireless Light Sensor (PS-3213)
- PASCO data collection software (see www.pasco.com)
- PASCO Track (Metal or Plastic) (see www.pasco.com)
- EP-3558 Light, Color & Optics Module* for Essential Physics (see www.pasco.com)
- EP-3582 Fiber Optics Cable and Adapter

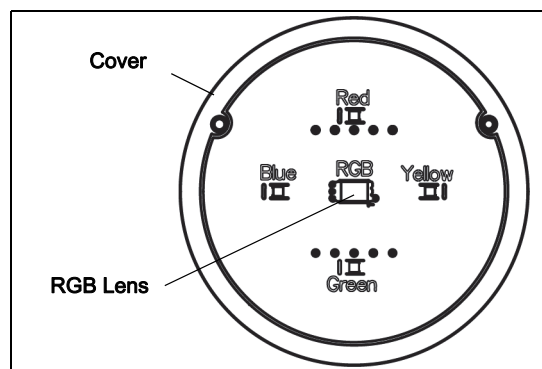
(*Such as lens holders, lenses, mirrors, refraction tank, prism, viewing screen, diffraction gratings, etc.)

- The Wireless Light Source is optically compatible with all of PASCO’s Basic Optics Components when the components are mounted on a PASCO track using the OS-8472 Dynamics Optics Carriage.



Operation

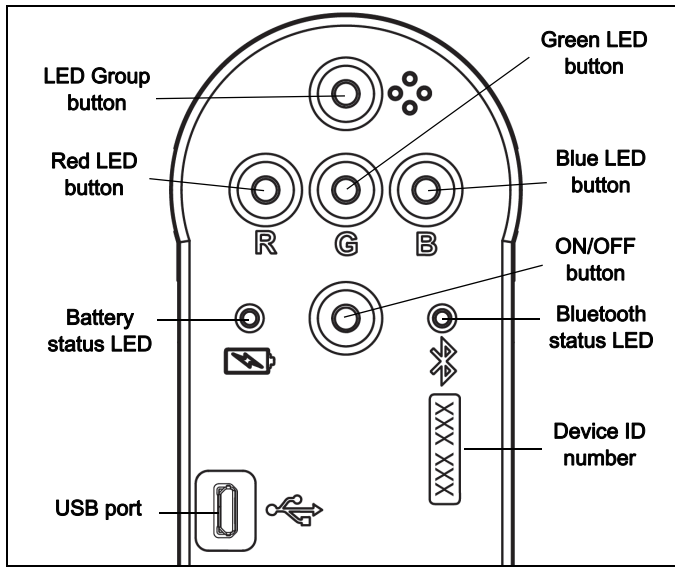
On the front of the Wireless Light Source, the four color LEDs (Red, Yellow, Green, and Blue) and the RGB (Red-Green-Blue) lens are protected by a clear plastic cover.



The front also shows an important CAUTION label. Do not look directly into the light during operation.



The back panel has four LED control buttons, an ON/OFF button, two status LEDs, the USB port, and the six-digit Device ID number.



Status LED Information

The Bluetooth and the Battery Status LEDs operate as follows depending on the type of connection:

For a connection to the USB Charger or a USB Port

Bluetooth LED	Status
Red blink	Ready to pair
Green blink	Connected

Battery LED	Status
Yellow ON	Charging
Green ON	Charged

For a wireless Bluetooth connection

Bluetooth LED	Status
Red blink	Ready to pair
Green blink	Connected

Battery LED	Status
Red blink	Low power

Charge the Light Source

- Connect the Cable:** Use the Micro USB Cable to connect the micro USB port on the back of the Wireless Light Source to the USB port on the PS-2572 USB Charger (or a computing device). Connect the charger to an electrical outlet. Charging begins automatically. The battery status LED shines yellow while the unit is charging, and will shine green when the battery is charged. The charger circuit inside the Light Source turns itself off when the unit is fully charged. The battery is partially charged at the factory. Initial charging time may be three hours or longer.

Control Button Information

ON/OFF Button

Press the button to turn the Light Source on, Press and hold the button until the battery status LED shines red to turn the Light Source off. The Light Source turns itself off after a brief period if it is turned on, but no LED is turned on. If the Light Source is turned on and one or more LED buttons are pressed, the Light Source will remain on until the ON/OFF button is pressed and held. If the LEDs are turned off, but the ON/OFF button is not used to turn the Light Source off, it will turn itself off after a brief period.

If the battery status LED blinks red (low power), connect the Light Source to the USB Charger or to a USB port.

LED Group Button

Press the button once to turn on all four LEDs. Press the button a second time to have the red, green, and blue LEDs shine. Press the button a third time to turn off the LEDs.

Red LED Button

Press the button once to turn on the red LED so that it shines through the central RGB lens. Press a second time to increase the light intensity to medium. Press a third time to increase the light intensity to high. Press a fourth time to turn off the red LED.

Green LED Button

Press the button once to turn on the green LED so that it shines through the central RGB lens. Press a second time to increase the light intensity to medium. Press a third time to increase the light intensity to high. Press a fourth time to turn off the green LED.

Blue LED Button

Press the button once to turn on the blue LED so that it shines through the central RGB lens. Press a second time to increase the light intensity to medium. Press a third time to increase the light intensity to high. Press a fourth time to turn off the blue LED.

Mixing Colors

Press the red LED button and the blue LED button to see the red-blue color combination from the central RGB lens. Likewise, press the red LED button and the green LED button to see the red-green color combination. Press the blue LED button and the green LED button to see the blue-green color combination. The light intensity for each LED is controlled in the same way as before

(that is, one press = low, second press = medium, third press = high, and a fourth press turns the LED off.)

Press and **HOLD** any of the red-green-blue LED buttons to turn off all the LEDs.

White Light

Turn on all three LEDs and the central RGB lens will shine white. The light intensity for each LED is controlled in the same way as before.

Press and **HOLD** any of the red-green-blue LED buttons to turn off all the LEDs.

Wireless Operation

Future versions of PASCO data collection software will be able to communicate via Bluetooth with the Wireless Light Source. In wireless operation, the LEDs will have many more than three “steps” of light intensity, and the software will be able to modulate the light.

Go to the PASCO Web site at:

www.pasco.com/downloads

to check on the latest updates of the PASCO software.

Software Help for the Future

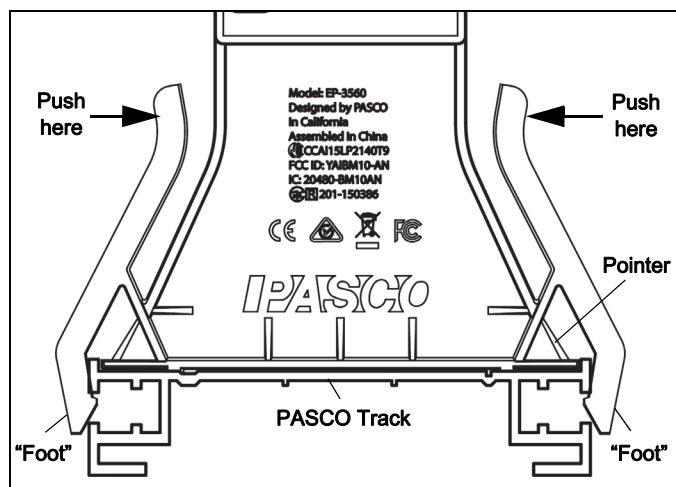
See the SPARKvue Help or PASCO Capstone Help for information about collecting, displaying, and analyzing data.

- In SPARKvue, select the HELP button in any screen including the Home Screen.
- In PASCO Capstone, select PASCO Capstone Help from the Help menu, or press F1.

Using the Light Source and a Track

The Wireless Light Source fits on any PASCO track. Hold the Light Source above the track, and push inward on the flexible tabs. Put the Light Source on the track,

and then release the tabs. The “feet” of the Light Source fit into the slot on both sides of the track.



Slide the Light Source along the track to the desired position. Note that there is a pointer on both sides of the Light Source that will indicate the position of the central RGB LED for measurement purposes.

To remove the Light Source, squeeze inward on the flexible tabs to spread the “feet”, and then lift the Light Source.

Battery Life

Battery Usage

Battery life is very important to making the Light Source simple and always ready to use, so all of the PASCO wireless products are designed for long battery life. For example, the Light Source turns itself off after a brief time of inactivity to conserve battery life.

The battery life between charges for the Light Source range from one to four weeks or more.

If the battery status LED blinks red, connect the Light Source to the USB Charger or to a USB port.

Maximizing Battery Life

One of the factors that affects battery life is the storage temperature. Therefore, avoid storing the Light Source in very cold or very hot environments.

If the battery will not hold a charge, contact PASCO Technical Support.

Replacement Items

Check with Technical Support regarding possible replacement items.

Technical Support

For assistance with any PASCO product, contact PASCO at:

Address:	PASCO scientific 10101 Foothills Blvd. Roseville, CA 95747-7100
Phone:	916-462-8384 (worldwide) 800-772-8700 (U.S)
Email:	techsupp@pasco.com
Web:	www.pasco.com/support

Limited Warranty

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

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

