## 2001MATNAM

www.steripen.com moo.naqinate@otni 161: (207) 374-5800 Hydro-Photon, Inc.

End Cap Screw

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5) Indicator LED (Light

4) Activation Button

3) Water Sensors (2)

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Guide to SteriPEN® Parts

1) UV Lamp Cover

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# SteriPEN® Travelermini SteriPEN<sup>®</sup> User's Guide

Instructions for Using SteriPEN®



Thank you for buying  $\ensuremath{\mathsf{SteriPEN}}\xspace^{\ensuremath{\mathfrak{B}}\xspace}$  , and congratulations on your purchase. Years of careful research, development and testing have gone into the creation of this innovative product.

## How Does SteriPEN<sup>®</sup> Work?

SteriPEN® uses shortwave germicidal UV light to disinfect water. This range of UV light disrupts the DNA of microbes in seconds. Without intact DNA, microbes cannot reproduce to make you sick.

## **Risks with Bottled Water**

Bottled water in many countries comes from unknown and unregulated sources. Even recognized brands can be subject to fraud. Use on any source of fresh water in anv country.

## QUICK START GUIDE Before Use

visit www.steripen.com.

Important Battery Information Disposable CR123 batteries are strongly recommended and will yield up to 100 one-half liter (16 oz.) treatments. Battery quality varies greatly by brand. Use only well-known brand name batteries. For more information,

#### Insert 2 CR123 batteries correctly.

• Remove lamp cover. *Note: water sensor pins at base* of lamp must be dry.

• Use SteriPEN® only with clear water. Discolored or dirty water should be pre-filtered until clear prior to SteriPEN® treatment. Use available SteriPEN® Pre-Filter or FitsAll Filter to help clarify water. Coffee filters or a shirt can also be used in an emergency.

SteriPEN® treats two ranges of water volume: Push activation button twice for up to one-half liter (16 fl. oz.)

 Push activation button once for volumes between one-half and 1 liter (16 - 32 fl. oz.)

## 3 Easy Steps

1-Push activation button once or twice to select volume of water and activate lamp – green Indicator LED will flash for up to 15 seconds indicating SteriPEN® is ready to use. Note: SteriPEN® will not function unless this step is completed before immersing lamp in water.

2-While green Indicator LED is flashing, dip the UV lamp into the water so that lamp and water sensing pins are completely immersed. Lamp will turn on automatically Note: If visible light is not evident, the lamp is not on, and water should not be consumed.

3-Agitate the water by stirring thoroughly until the lamp automatically turns off and indicator light turns green, indicating treatment is complete. Agitation throughout treatment is essential to provide uniform exposure of all water to the UV light. Note: If red LED turns on after lamp shuts off, the dose was not complete.

#### After Use

Remove SteriPEN® from water. Dry off lamp and water sensors with clean cloth and place cover on lamp

**SAFETY AND OPERATING TIPS** Water Containers

SteriPEN<sup>®</sup> may be used in glass, plastic, ceramic or metal containers. SteriPEN® should not be used in guartz containers

## Water Sense Circuitry

The SteriPEN® water sense circuitry is intended to prevent the UV lamp from illuminating unless it is completely immersed in water. If SteriPEN® is not immersed in water within 15 seconds of being activated, it will deactivate.

#### **Cold Weather Considerations**

Bring SteriPEN® up to a temperature above 32°F/0°C before using. Battery performance may be adversely affected by cold weather. NiMH rechargeable batteries are the best choice for cold weather. Store your batteries in your pocket or warm place when in cold weather conditions.

SteriPEN® LED (Light Emitting Diode) Signals

SteriPEN® LED (Light Emitting Diode) Signals	
LED Color and Pattern Display	Indication
<b>Operating Signals</b>	
Green, fast flashing (after button push)	Unit is armed and ready to treat water
Green, slow flash- ing: 1 second on, 1 second off (after dose completion)	1 L (32 fl. oz.) dose completed
Green, steady (after dose completion)	0.5 L (16 fl. oz.) dose completed
Green blinks for 15 seconds followed by a quick Red flash	Time expired, try again. The user has 15 seconds to put the SteriPEN® purifier in water after activation.
Green flash followed by Red flash	Sensor pins are wet. Sensor pins must be dry when pressing Activation Button. (1) Dry water sensing pins. (2) Press Activation Button once for 1 L (32 fl. oz.) dose or twice for 0.5 L (16 fl. oz.) dose. (3) After green indicator LED begins flashing immerse lamp and sensors in water and begin treatment.
Red, steady	Dose incomplete. Repeat treatment.
Battery Warnings	
Red, fast flashing	Low battery warning; replace or recharge batteries
Green slow blinking with Red flashes	1 L (32 fl. oz.) dose completed; low battery
Green, steady with Red flashes	0.5 L (16 fl. oz.) dose completed; low battery
LED will not come on	<ol> <li>(1) Check battery orientation</li> <li>(2) Charge or replace batteries</li> <li>(3) Clean battery contacts</li> <li>(4) Return SteriPEN® purifier for repair</li> </ol>
Lamp Warnings	
Red 2 flashes, Green 2 flashes (repeating)	Over 2,900 treatments com- pleted; lamp replacement needed in under 100 doses
Red 3 flashes, Green 1 flash (repeating)	Lamp failure; replace lamp
Normal indicator LED function, yet UV lamp emits no visible light	Lamp failure. Do not consume water. Follow warranty procedure.
SteriPEN® Traveler mini replace batteries, loosen a coin and then remove e Install new batteries with positive ends of batteries below). Replace the batt until snug. Do not over tig will be storing your Steri	ecommendations above. uses two CR123 batteries. To screw in battery end cap witl end cap (see diagram below). n battery polarity as shown— s facing out (see diagram ery end cap and tighten screw ghten screw. Note that if you PEN® Traveler mini for a long o remove the batteries from

will period of time, it is best to remove the batteries from the device. As with all high-tech devices, the batteries must be removed when storing the unit. This will reduce/prevent battery terminal corrosion, spring fatigue and batteries from draining. For more battery information, visit www.steripen.com.



**IMPORTANT NOTE:** Many brands of CR123 batteries have built-in protection circuitry that instantly disables battery function when batteries reach a specific low charge threshold. If this "disable" function is triggered during operation the Traveler mini will be unable to give the "Low Battery" signal (blinking red LED). Until batteries are replaced or recharged the Traveler mini will not be operational.

#### **Care and Cleaning**

When not in use, SteriPEN® should be kept in a clean, dry, non-abrasive area or container. SteriPEN® should not be exposed to ambient temperatures above 140°F/60°C or below -4°F/-20°C. When storing SteriPEN® for long periods, remove batteries.

To clean SteriPEN®, wash with a soft cloth and a mild soap solution. Rinse soap from device and dry with a clean, soft cloth. Note that while the battery compartment of SteriPEN® is designed to be water resistant, it is not guaranteed to be impermeable and should therefore never be submerged.

## Troubleshooting

If flashing green Indicator LED shows that SteriPEN® is armed, but the lamp does not light when immersed in water, check to be sure lamp is completely immersed and that water is contacting both water sensing pins.

If immediately after completing a treatment another treatment is attempted, but fast flashing green LED will not activate, check to see that the water sensing pins are not immersed in water or wet. Remove SteriPEN® from water and dry sensing pins off and press activation button again.

If fresh batteries have been installed, but SteriPFN® will not complete a dose, low battery temperature may be the cause. Store your batteries in your pocket or warm place when in cold weather conditions. If after initiating a dose UV lamp shuts off and indicator LED does not come on at all, the batteries may be drained and in need of replacement or charging. See "IMPORTANT NOTF" above.

#### Technical Support

For support, please email support@steripen.com or call 1-888-SteriPEN

## **Repair Information**

Any repairs to your SteriPEN® should be done by an authorized technician. Please contact us at above phone number or at support@steripen.com for repair guidance.

#### **Product Registration & Warranty Information**

Hydro-Photon, Inc. warrants your SteriPEN® product for 1 year from date of purchase for any manufacturing defect. For product registration and complete warranty information, please visit www.steripen.com/warranty or contact your local distributor/importer.

## Warnings for Safe Use

• It is a violation of Federal law to use this product in a manner inconsistent with its labeling. 40 C.F.R. \$156.10(i)(2)(ii). Improper operation of SteriPEN® may cause injury. Read and understand all warnings prior to operating SteriPEN®.

• Do not allow water to enter SteriPEN® through the battery compartment.

• Do not operate SteriPEN® in quartz containers such as quartz laboratory beakers.

• SteriPEN® should not be used by children.

• SteriPEN® is a high voltage device. Removal or tampering with the electronic circuit board or lamp assembly may cause injury, or damage SteriPEN®.

- Do not open, expose, modify or touch internal circuitry; this can lead to high voltage shock.
- Do not attempt to bypass water sensor; this is an important safety feature.
- As with any water treatment system, you should always have a backup method available, including an extra set of recommended batteries.

• Like most fluorescent-type lamps, the SteriPEN® lamp contains a small amount of mercury. Please return your SteriPEN® at the end of its productive life to your distributor/importer to permit correct recycling or safe disposal.

- SteriPEN® is not intended to disinfect surfaces of a drinking container, i.e. those that typically contact the mouth when drinking. Be certain that your drinking container has been properly cleaned/washed prior to using SteriPEN®.
- SteriPEN® is not intended to disinfect water above the surface of the water in the container, i.e., droplets of water suspended on the side of the glass. Remove droplets by drying them before consuming.
- SteriPEN® is intended for use with clear water. Discolored or dirty water should be pre-filtered until clear prior to SteriPEN® treatment. Use available SteriPEN® Pre-Filter or FitsAll Filter may help clarify water. Coffee filters or a shirt can also be used in an emergency.
- SteriPEN® is designed to treat 0.5 or 1.0 liter (16 or 32 fl. oz.) of clear water. If in doubt about volume of water to be treated, confirm volume with a measuring device such as a measuring cup.
- When operating properly, the SteriPEN® lamp will emit visible light as well as UV. If lamp is not emitting visible light, it is not functioning properly, and should not be used until repaired.
- The SteriPEN® lamp assembly must be clean prior to use.
- If SteriPEN® is below 32°F/0°C it should be warmed above 32°F/0°C before operating.
- Do not allow impact to the lamp end. If lamp assembly (lamp or quartz sleeve) is cracked, chipped or damaged, do not operate. Return to your local distributor/importer for repair.
- Do not use as a light source.
- Do not use in liquids other than clear water. • Do not use in water with ice or water above 140°F/60°C.
- UV light can be harmful to eves and skin. Never look at an unshielded UV lamp during operation. When used properly, in water and according to instructions. the user is well shielded from UV light.
- Do not operate near skin, eyes or bodily orifices.
- While carefully controlled microbiological testing of SteriPEN® has been conducted, use of SteriPEN® in the field may produce results that vary from our laboratory test data.

# **Certifications & Patents**

Conforms to EN61010-1:1993 + A1 + A2 and EN 61326

Listed 3058969. Conforms to Standard UL 61010A-1

Certified to CAN/CSA Standard C22.2, No. 1010.1-92

U.S.E.P.A. Company #73679, U.S. EPA Establishment #07369-ME-001

SteriPEN® technology is patented in the USA with further U.S. patents pending and patents pending worldwide. SteriPEN® is a registered trademark of Hydro-Photon, Inc. © 2010 Hydro-Photon, Inc.

