Cautions and Warnings

- 1. Do not run the pump without the tubing and quick disconnect plug installed.
- Do not use this pump for any purpose other than sampling with low backpressure spore trap cassettes or carpet sampling cassettes. Use of this pump for other types of sampling, such as for asbestos, will cause premature failure and void the warranty.
- 3. Do not use of any AC power adapter or battery charger other than the one supplied.
- 4. Do not submerge the pump or subject the pump to any liquid.
- Always follow basic safety precautions when using this product to reduce risk of injury, fire or electric shock.

Maintenance

This pump comes equipped with an exhaust filter located on the inside tray of this unit. It is recommended to replace this filter every 3 months or if a loss of performance of the pump is observed. Your filters may last longer or need to be changed more frequently depending on the amount of use the pump gets and the environments it is exposed to. Replacement filters may be ordered from Zefon or a Zefon distributor under product #03879.

Proper care and maintenance of your pump is essential for a long useful life. Rough and abusive use and/or accidental impacts may damage the unit. *Zefon* recommends periodically wiping down the unit with a clean dry cloth to keep it free of dirt and debris along with regular inspections of the AC power supply and cords to ensure it is not damaged and posing an electrical hazard.

Limited Warranty

Zefon International warrants this pump to be free of defects in parts or workmanship for a period of 1 year from date of purchase. Zefon will without charge repair or replace, at its option, the defective pump or component parts upon delivery by the customer to Zefon's repair facility.

This limited warranty covers defects in workmanship and material. It does not apply to:

- 1. Product damage by accident or weather related circumstances
- 2. Misuse or abuse of the product, including damage from impact, cord damage or water damage.
- 3. Lack of proper care and maintenance
- 4. Failure to follow instructions
- 5. Any type of unauthorized repair attempts or modifications.

Do not remove the inner pump housing tray or attempt to make repairs. Damage may occur to the pump and all warranties will be immediately voided.

If it should become necessary to return the pump for service, please call Zefon at 352-854-8080 for a return authorization number and return instructions. Please be prepared to provide us a description of the problem when calling. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. A return authorization number must be issued prior to shipment and must be marked on your shipment.

Disclaimer

Zefon shall not be liable for direct, indirect, consequential, incidental or other damages resulting from the sale or use of any goods including lack of use due to equipment failure. Zefon's total liability shall be limited to repair or replacement of the product.

Zefon assumes no responsibility whatsoever to any party whosoever for any property damage, personal injury or death received by or resulting from, in whole or in part, the improper use or storage of this product by the user, person, firm, entity, corporation or party not adhering to the instructions and warnings in this manual.

Operating Instructions

Zefon Z-LiteTM

IAQ DC Powered Sampling Pump



Description

The Zefon Z-Lite IAQ DC Sampling pump is designed for use with various IAQ sampling devices at flows of 5-20 lpm

Specifications

Flow Range: 5-20 lpm (low backpressure spore traps, such as Air-O-Cell, MoldSnap, or Z5)

2-8 lpm (carpet sampling cassettes)

Flow Meter: 2-30 lpm display range with +/- 2% Accuracy

Battery Run Time: 2.5 to 3 hours

Battery Charge Time: Approximately 3 hours

Battery: 12v, 7.5 Ah Sealed Lead Acid

AC Power: 100-240v 50/60Hz AC power transformer/charger Housing Dimensions: 15" (38cm) L x 9" (23cm) W x 10.5" (27cm) H Telscoping from 12.25" to 36" from the top of pump

Overall Weight: 18.8lbs (8.5kg) (including charger and sampling stand)

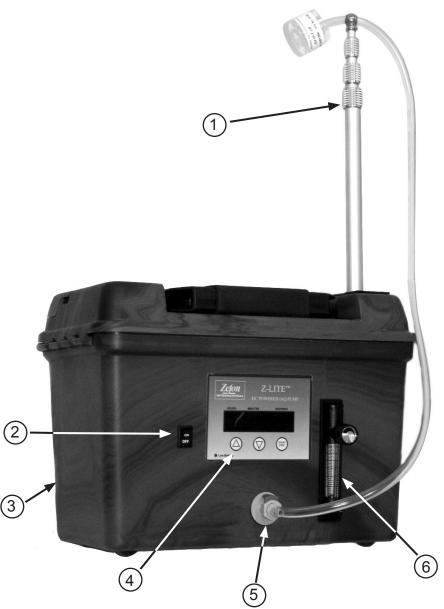


The Professionals Choice for Air Sampling Equipment

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LA03031 Rev. 3

Pump Overview



- 1. Telescoping sampling stand
- 2. On/Off power switch.
- 3. Charging jack located on back side.
- Control Panel with display of Hours/Minutes/Seconds, Up/Down Arrows used to set time, Start/Stop Button and Low Battery Light.
- 5. Quick Disconnect hose connection.
- 6. Flow Meter with adjustment valve

Using the Pump

Setting Up the Pump for Sampling

- Remove the sampling stand from the inside tray and screw into the top of the lid. Adjust to the desired height.
- Connect the tubing to the pump at the Quick Disconnect port on the pump. Attached the other end to the top of the sampling stand.
- 3. Turn the pump power switch on.
- 4. Use the Up/Down Arrows to set the desired sampling time.
- 5. Press the START/STOP button to start the pump. (do not attach any filter media during this step)
- 6. Adjust the flow using the knob on the flow meter to the desired flow.
- 7. Once the flow rate is set, Press the START/STOP button to stop the pump.
- Press and hold the START/STOP button for 3 or more seconds to reset the timer to the original sampling time.

Taking a Sample

- 1. Turn the pump power switch to the ON position if it is not already on.
- 2. Use the Up/Down Arrows to set the desired sampling time.
- 3. Press the START/STOP button to begin sampling.
- 4. When the sample is finished, the pump will beep and the timer will reset itself to the time that was originally set.

Charging the pump

- When the pump battery level has dropped to a level where the pump cannot operate with sufficient voltage to maintain flow at a sufficient flow level, the Low Battery light will illuminate.
- To charge the battery, use the supplied AC power adapter. The POWER light on the charger will illuminate RED and a solid GREEN light indicates the current charge capacity.
- 3. If the pump battery has become fully discharged, the charger will default into trickle charge mode for the first couple of hours until the battery has stabilized with a minimum charge level that will safely allow fast charging.
- 4. Once the battery is fully charged and operating in trickle charge mode (100% light will be solid), it is safe to leave the pump connected long term to keep in top condition or to unplug and begin to use. The pump may optionally be used while connected to the charger to run on AC power.

Operating Tips

- 1. To quickly set the timer to a 5 minute sampling time, hold the up arrow while turning on the pump.
- To reset the pump to the most recently used sampling time, press and hold the START/STOP button for 3 seconds.
- 3. If the battery voltage drops too low during sampling to maintain proper flow, the low battery light will illuminate and the pump will stop. The remaining sampling time will be shown on the display.

Flow Rate Accuracy

Flow meters like the one installed on this pump are considered 'secondary' standards for measuring flow. It is recommended that the accuracy of this flowmeter is periodically verified against a primary flow standard such as a bubble meter or dry calibrator.