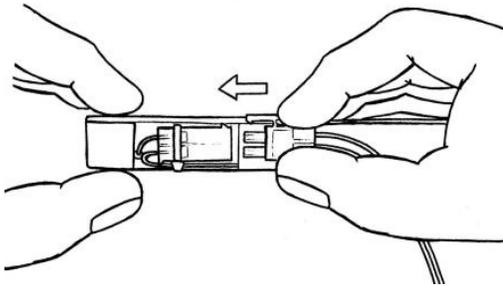


Getting Started

Connect the Battery

We shipped your Backpack with the Battery disconnected to prevent the pump from being accidentally turned on during shipment. To connect the Battery, pull up on the Flap (with the reflective striping) of the Battery Pouch and pull the Battery out.



Push the white Connector on the end of the red & black Power Wire into the mating Socket on the Battery, as shown in the figure to the left. Push the Connector all the way into the Socket until the tip of the Latch engages, locking it in place.

Replace the Battery back into the Battery Pouch of the Backpack and close the Flap securely.

If using the Lithium-Ion Rechargeable Battery, please charge it fully before using it for the first time.

Fill the Reservoir

Unzip the longer of the two zippers at the top of the Backpack to access the Reservoir. Slide the black plastic Slider at the top of the Reservoir to the right to remove it, and then unfold the Flap underneath to open the Reservoir. Reverse these steps to close the Reservoir. *A tip on closing the Reservoir:* When sliding the black Slider back on, pinch the folded Flap closed just ahead of the Slider as you slide it back on to the left.

The Reservoir can be filled with your choice of:

1. Ice cubes + 16 ounces or more of water for circulation
2. Four round ice blocks (made using Cylindrical Ice Block Molds) + 16 ounces or more of water for circulation, or
3. Four 1/2 liter (16.9 ounce) frozen plastic water bottles + 32 ounces or more of water for circulation

Ice cubes will provide the greatest cooling intensity but significantly less cooling duration than either ice blocks or frozen water bottles (which provide the longest duration). We recommend that you experiment to find what works best for you.

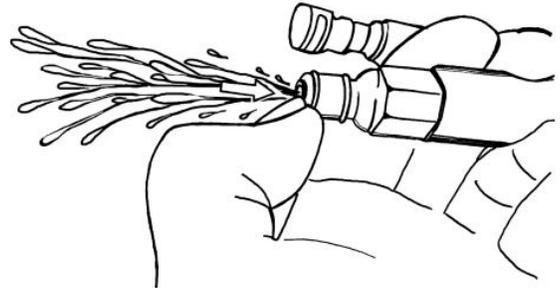
If the weight of the Backpack filled to capacity is uncomfortable, it's OK to fill it only partially - it will still operate properly.

A few tips to take note of:

1. If filling with ice cubes, a handy funnel can be made by cutting the bottom out of a plastic cup and inserting that into the top of the Reservoir to keep it open.
2. If using larger blocks of ice, the remaining spaces between the blocks can be filled with smaller ice cubes or ice chips to maximize the cooling capacity.
3. If using frozen water bottles, please be sure to follow these steps:
 - 3.1 Remove the entire paper label from each bottle, otherwise this could soften, come loose and become lodged in the pump's Inlet Screen. Soaking in hot water may be helpful in removing the labels.
 - 3.2 Remove all traces of remaining sticky glue or adhesive under the label. Some form of solvent (e.g. paint thinner, acetone or alcohol) may be helpful in removing the residue.

- 3.3 Open each bottle and pour out at least 2 ounces of water before freezing. If this is not done, the bottom will bulge out when frozen and all four bottles may not fit in the Reservoir.
- 3.4 After placing the frozen water bottles in the Reservoir, add one quart (32 ounces) of water, or enough to cover at least the bottom half of the upper pair of water bottles.
4. Use the coldest water available to minimize the amount of ice that is melted in the process of chilling the water the first time you fill the Reservoir. On subsequent refills, don't pour out all of the remaining cold water. If refilling with cubes or blocks, leave a small amount of the chilled water for circulation. If using frozen water bottles, don't pour out any of the water - simply replace the bottles with freshly frozen ones.

5. After filling the Backpack for the first time (or when refilling anytime after all of the water has been drained from the Reservoir), press in on the round spring-loaded tip of the Male Connector at the end of the backpack's Outlet Hose with just the tip of your finger or fingernail to let some water begin to stream out, as shown in the figure to the right.



Tilting the Backpack slightly clockwise (so the Hoses point up at an angle) while pressing in on the spring-loaded tip of the Male connector will assist in removing any air remaining in the Pump.

This assures the Pump is fully primed and water will begin circulating as soon as the Power Switch is turned ON.

Put the Backpack On

Adjust the Waist Strap, Shoulder Straps and Sternum Strap (between the shoulder straps) for the most comfortable fit. Note that the Sternum Strap Ends can also slide up and down along each shoulder strap. The Elastic Loop on each strap may be used to keep the excess length secured and out of the way.

Connect to the Vest

Push the Connector on the Backpack Hose into the mating Connector on the end of the Vest Hose. Push them together until a click is heard or felt to ensure proper connection. Press on each Connector's spring-loaded Latch to release.

Turn the Power Switch On

The Power Switch for the pump is located on the Left Shoulder Strap. This can be turned on and off as required to regulate the flow of ice-chilled water through the Cooling Vest.

The Power Switch is equipped with a sliding Switch Guard to prevent it from accidentally being switched on. Slide the Power Switch Guard down to allow the Power Switch to be turned ON.

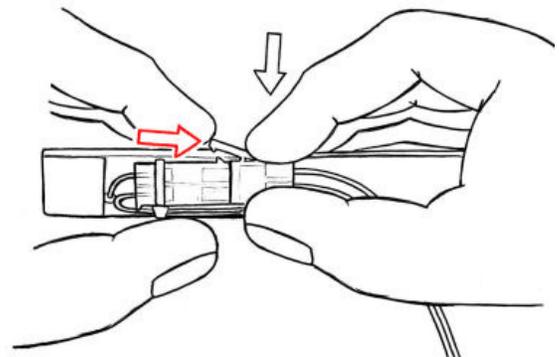
It is recommended that you slide the Power Switch Guard UP when the Backpack is not being used to prevent accidentally running the batteries down.

When the Backpack and Cooling Vest are filled for the first time, or if all of the water was drained out after the previous use, it may take 30 to 60 seconds to clear all the air from the pump and hoses (the pump is self-priming, so this process takes place automatically).

Helpful Tips for Using Your Backpack

REMOVING THE BATTERY PACK:

1. Open the Flap on the Battery Pouch and pull out the Battery.
2. Pinch down on the back portion of the Latch (as shown by the black vertical arrow in the figure to the right) of the white Power Connector located on the end of the red & black Power Wire.
3. Push back on the end of the Latch with the index finger of your other hand (as shown by the red horizontal arrow in the figure to the right) to unplug the Connector from its Socket on the Battery.



REPLACING THE BATTERIES:

If using the Lithium-Ion Rechargeable Battery, simply recharge and replace after charging. If using the Quick-Change Power Pack (for AA batteries), follow the steps below:

1. Pull up on the end of the Velcro Strap on the Battery Pack.
2. Slide the Lid open in the direction indicated by the arrow on the Lid.
3. Replace the dead batteries with new ones, taking note of their alternating positive/negative orientations (the flat end of each cell goes against the spring).
4. Close the Power Pack Lid and pull the Velcro Strap over the Lid to hold it tightly closed.
5. Reconnect the Power Connector by pushing it all the way into the Socket of the Power Pack until the Latch engages, locking it in place. Replace the Power Pack back into the Battery Pouch of the Backpack and close the Flap securely.

When storing or transporting your Backpack, slide the Power Switch Guard UP to prevent the Power Switch from accidentally being turned on.

USING AN EXTERNAL POWER SOURCE:

The Backpack can be powered from an external 12V DC power source using the optional External Power Cord. This is especially handy when the Backpack is used in or on a vehicle, eliminating the need for the Battery. To facilitate easy connection/disconnection of the External Power Cord, the red & black Power Wire inside the Battery Pouch can be routed externally as follows:

1. Insert the white plastic Socket on the end of the External Power Cord into the small opening in the bottom seam of Battery Pouch (located about 1 inch to the right of the lower left corner).
2. Feed the External Power Cord into the opening until the Socket protrudes out the top of the Pouch, then plug the white Connector on the end of the red & black Power Wire into the Socket.
3. Pull the External Power Cord back out of the opening until both the Connector and Socket come out. Continue pulling until the entire length (approximately 14 inches) of the red & black Power Wire is exposed, and then unplug the External Power Cord.
4. The Connector on the red & black Power Wire can now be passed under and through the Velcro Wrap on the Backpack's Outlet Hose so the Connector is retained near the Quick-Connect Fittings on the Hoses, keeping it within easy reach when connecting the External Power Cord while wearing the Backpack.

DRAINING WATER BEFORE REFILLING THE RESERVOIR:

It's not necessary to turn the Backpack upside down to drain any of the water before refilling. An alternate method is to simply press in on the round spring-loaded tip of the Male Connector at the end of the backpack's Outlet Hose with just the tip of your finger or fingernail to let the water stream out, as was shown in Step 5 (in red) on page 2 of this guide. This can be accomplished even more quickly by turning the Power Switch ON at the same time.

DRINKING FROM THE BACKPACK:

The Backpack is equipped with an insulated Hydration Tube with a Bite Valve on the end of it. In order to drink from the Bite Valve, the Vest must be connected to the Backpack to enable the flow of water through the Hydration Tube. To initiate the flow of water through the Bite Valve, simply bite down on the soft clear (silicone rubber) portion and suck.

It's easier to drink from the Bite Valve when the Pump is turned ON, as this generates a very small amount of pressure in the line, but not enough to cause unintentional leakage from the Bite Valve.

If desired, the Bite Valve can be closed to prevent any possible leaking (during transport or storage) by rotating the end 180 degrees clockwise (when looking down on the end of the Bite Valve).

There is a small inline filter on the Hydration Tube to prevent particulates from being ingested. The filter does not stop the passage of microorganisms, so it's important to keep the entire system clean if you plan to drink from it. For cleaning the Reservoir, Hydration Tube and Bite Valve, please read the answer to **What maintenance is required?** on the next page.

Answers to Some Questions You May Have:

What maintenance is required?

Only periodic cleaning of the water circulation system. It's important to keep the entire system clean if you plan to drink from it. In general, periodic flushing of the system with a 1/2% solution of bleach and water (one teaspoon per quart) does a satisfactory job of preventing the build-up of potentially harmful micro-organisms. It's also important to keep the Vest connected when flushing the system, as the water that you drink also flows through the Vest.

For cleaning the Reservoir, Hydration Tube and Bite Valve, we recommend that you read the following:

Top 7 Ways to Clean Hydration Bladders: <http://walking.about.com/od/hydration/tp/camelbackclean.htm>

Camelbak Cleaning Tablets: <http://walking.about.com/od/prpack/gr/camelcleantab.htm>

Since the Reservoir is not removable from the Backpack, some steps described in the links above are not applicable.

If you wish to drain all the water from your Vest and/or Backpack prior to long-term storage, a pair of our Quick-Disconnect Adapter and Drain Fittings are recommended.

How long will the ice last?

The ice can last as long as four hours or more, or can melt in as little as 90 minutes in extreme cases. The actual duration depends on many factors which can be divided into two groups: How much "cold" you start with and how rapidly heat is absorbed.

It takes more heat to melt a pound of ice just removed from a deep freezer than a pound of ice that has been sitting out and is beginning to melt, thus the colder the ice you start with, the better. When you add water to that ice (which is necessary for circulation through the pump and vest), it "warms up" the ice, so adding only a minimal amount of the coldest water possible (ice water) is best.

More body heat is generated by a person rigorously exercising than at rest. More heat will be absorbed when the vest is worn tightly against bare skin as compared to loosely over a shirt. In addition, more heat is absorbed from the surrounding environment when the ambient temperature is high and there is nothing worn over the vest. This is why we recommend wearing at least a lightweight windbreaker-type jacket over the vest to minimize loss of cold to the atmosphere.

The heat absorbed by the water in the vest is in turn, absorbed by the ice, causing it to slowly melt. You will obtain the best cooling performance if you start with the coldest ice, the coldest and least amount of water and minimize your loss of "cold" to the atmosphere by wearing a thermally insulating garment over the vest.

How do I control the temperature or amount of cooling?

Use the power switch on the backpack's left shoulder strap to turn the pump on & off as needed. As a point of reference, the volume of water in the vest is cycled through the system approximately four times per minute when the pump is on.

How long will the batteries last?

The water circulation pump in the backpack can run for 6 hours or more continuously using a fully charged Lithium-Ion Battery, or for 8 hours or more continuously on a fresh set of 8 AA alkaline (single use disposable) batteries in the Quick-Change Battery Pack. If run intermittently, the total pump operating time can be even longer.

Can I use NiMH rechargeable AA batteries in the Quick-Change Power Pack?

No, because NiMH rechargeable batteries generate only 1.2 Volts per cell (as compared to 1.5 Volts per cell from alkaline batteries), so 8 NiMH rechargeable batteries in series will generate only 9.6 Volts.

Which performs best: The Lithium-Ion Rechargeable Battery or the Quick-Change Power Pack filled with Alkaline (single use) batteries?

The Lithium-Ion Rechargeable Battery provides the ultimate in convenience as it can be recharged quickly and easily in just 4 hours, and eliminates the need for the removal and replacement of individual cells that is required when using AA batteries in the Quick-Change Power Pack.

Although the initial cost is higher, because the Lithium-Ion Battery is reusable it pays for itself after only 10 to 15 uses (compared to the cost of using disposable alkaline batteries).

The Lithium-Ion Battery is only one half the weight of the Quick-Change Power Pack filled with 8 AA batteries, and provides almost the same operating time: 6+ hours for the Lithium-Ion Battery compared to 8 hours for the alkaline batteries in the Quick-Change Power Pack.

Customer Support

Your satisfaction is our number one goal. If you have any questions, requests or unresolved issues, please contact us at: support@veskimo.com or call us toll free at 877-MY-VESKIMO (877-698-3754) anytime.

Product Warranty

Veskimo warrants its products against defects in material and workmanship under normal use and service for one (1) year from the date of original retail purchase. If defective, the product will be repaired or replaced at our option, at no charge with dated proof of purchase. This warranty applies only to the original retail consumer and is not transferable.

This product is sold as is. This warranty does not cover defects or damage resulting from: accident, misuse, improper operation, unauthorized modification, normal wear and tear or failure to maintain the product as specified in this User Guide. No warranties, express or implied. Veskimo disclaims all warranties not set forth herein, including warranties of fitness for a particular purpose. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our products.

Product Service

Please contact us prior to returning any products, so together we can determine the best course of action. We will do our best to resolve all issues as quickly as possible with the minimum amount of inconvenience to you. If your in-warranty product cannot be repaired quickly and completely, we will replace it at no cost to you.

For out-of-warranty products, please contact us to discuss what options are available. If your product is repairable, we will quote the cost for your approval before performing any repairs. If your product cannot be repaired, we may be able to offer you a comparable replacement product at a reduced price.

Please Follow These Important Safeguards:

- Read all instructions carefully before using.
- Save these instructions for future reference.
- This product is not intended for use as a therapeutic device.
- Do not use for anything other than the intended use.
- Do not rely on the Backpack as your only source of hydration.
- Not for use by small children without adult supervision.
- Do not operate if damaged - Contact Veskimo for service, repair or replacement.
- Do not disassemble - There are no user-serviceable parts inside. Disassembly or modification voids the warranty.
- Use only power sources purchased from Veskimo (Lithium-Ion Battery, Quick-Change Power Pack for AA batteries, or 12V DC External Power Cord) to power the Backpack.
- Do not operate dry - Extended dry operation may damage the pump and will void the warranty.
- Never put anything but water (or water with a recommended cleaning agent) and ice (no dry ice) in the system, otherwise the warranty is voided.
- Do not fill with alcohol, electrolytes, sports or energy drinks - Only pure water.
- After filling, ensure the sliding top closure is securely in place to prevent leakage.
- Close the Bite Valve during transport or storage by rotating the end 180 degrees clockwise (when looking down on the end of the Bite Valve).
- Do not place or store near a source of heat.
- Do not place any part of the system into a freezer.
- Do not immerse the Backpack in water.
- Clean & sanitize the entire system periodically to prevent build-up of potentially harmful microorganisms.
- Remove batteries prior to long term (seasonal) storage.

Backpack Features and Specifications

This insulated Hydration Backpack incorporates a high efficiency battery powered pump to supply ice-chilled water to the Veskimo Personal Microclimate Cooling Vest. Together, the Backpack and Vest comprise a fully self-contained Complete Personal Cooling System providing the user with comfort, convenience and unrestricted mobility.

Fill with up to seven pounds of ice plus one pint or more of water for over four hours of body cooling. The pump can run for 6+ hours using the Lithium-Ion Rechargeable Battery or 8 hours using eight alkaline AA batteries in the Quick-Change Power Pack. An optional External Power Cord connected to a 12V DC source can be used for continuous operation, eliminating the need for batteries.

The Backpack also functions as a hydration pack, serving up chilled, filtered drinking water on demand with the pump on or off.

- Extra large 4.4 quart capacity reservoir made from ultra-tough thermoplastic polyurethane
- Large 5.5-inch wide slide-opening top on reservoir for quick filling and easy cleaning
- Can be filled with ice cubes, cylindrical ice blocks or four 1/2 liter frozen water bottles (used as quick-change ice cartridges)
- 5/8-inch thick, 10 layer high-performance radiant reflective foil-faced gas-filled thermal insulation surrounds the entire reservoir
- Single charge of ice lasts for 4+ hours (actual duration dependant on user activity level and ambient temperature)
- Small high-efficiency pump circulates ice-chilled water through the cooling vest
- Lithium-Ion Rechargeable Battery provides 6+ hours of continuous pump operation (recharges in 4 hours)
- Optional Quick-Change Power Pack using eight AA alkaline batteries provides 8 hours of continuous pump operation
- Cooling rate can be adjusted to personal preference using the convenient power switch on left shoulder strap
- Dry-break style quick-disconnect fittings for easy connection to vest with no leakage when disconnected
- Backpack also serves as a source of chilled, filtered drinking water (hydration pack) with the pump on or off
- Drink tube on right shoulder strap is thermally insulated to keep first sip cold
- Bite-valve with removable cover and shut-off valve prevents leakage during transport or storage
- 130-micron inline filter on the drink tube prevents any particulates in the reservoir from reaching the bite valve
- Backpack constructed to Mil-Spec standards using rugged 600 Denier fabric
- Fully adjustable shoulder, waist and sternum straps with quick-snap buckle closures to comfortably fit all sizes
- Padded back panel and shoulder straps with breathable mesh provide enhanced ventilation
- Zippered external top pocket with key clip and mesh organizer for storing on-the-go essentials
- Mesh pocket on left shoulder strap holds cell phone, MP3 player or snack bar for convenient access while wearing the backpack
- Lower pocket holds battery pack for quick and easy access
- Reflective safety stripes for high visibility in low light conditions double as attachment loops for shock cord to strap extra items to the outside of the backpack, or to attach an auxiliary expansion pack
- Low-profile design keeps pack stable and prevents interference with helmet
- Dimensions: 21" tall x 7" wide x 6" deep (max) at bottom, 3" deep at top
- Weight empty: 2.5 pounds without batteries, 2.8 pounds with Lithium-Ion Rechargeable Battery, 3.1 pounds with AA Battery Pack
- Weight full with Lithium-Ion Rechargeable Battery and reservoir filled to maximum capacity (4.4 quarts): 11.7 pounds
- Color: Black with grey trim
- Warranty: One year on all materials & workmanship