## INSTRUCTIONS



# **Cold Therapy System**





## **ACTIVE ICE® COLD THERAPY SYSTEM**

# Instructions for Patients and Medical Professionals

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Patients and Medical Professionals should carefully read all of the following instructions and warnings before using and operating the Polar Active Ice® Therapy System.

WARNING: Possible Cold Related Injuries: The Active Ice® System can seriously injure skin if improperly used. Follow all instructions to ensure patient safety. Use only under the direction and supervision of a licensed healthcare practitioner.

Polar Products, Inc. will not be liable for injuries that result from misuse or misapplication of this system.

# Thank you for your order. We are proud to offer you a high-quality, American-made cold therapy system.

## Use Only as Prescribed

Patients first need to be assessed by their physicians for contraindications, risk factors, and medical history, before using this product. Supervision may be necessary to ensure precautions are followed, especially with young children and the elderly. Adhere strictly to your practitioner's instructions regarding use, treatment times, treatment frequency, settings, self-assessment and best practices regarding your specific condition. See page 8 of this instruction manual for more information on warnings, and risk factors for cold induced injury and/or contraindications.

## Warning: An insulation barrier is required, no direct contact with the skin.

Always wear an insulation barrier between the skin and the Active Ice<sup>\*</sup> bladder. Failure to use an insulation barrier between the pad and the skin can lead to a coldrelated injury. If post-surgery dressing or bandages on target therapy area do not completely cover the skin, place a piece of fabric over the bandage to ensure complete skin coverage. **CAUTION: Never use this non-sterile bladder on broken skin.** The insulation barrier must be dry, if moisture is present in the insulation barrier the skin may become colder than intended. If moisture is found, replace with a dry barrier immediately.

## Setting Up the System

a) **CAUTION: Always begin with power supply unplugged.** Do not turn on the system until all connections are complete and the hose from the cooler to the therapy bladder is free from bends or restrictions, as this will restrict water flow through the system.

b) Open the reservoir and fill with clean, cold water to the water fill line in the cooling reservoir. Be sure water covers the pump in the reservoir. **CAUTION: NEVER OPERATE THE UNIT WITHOUT WATER!** This can cause pump failure. **DO NOT OVERFILL THE RESERVOIR WITH WATER.** 

c) Completely fill the reservoir with ice to the return flow tube located near the top of the reservoir.

d) Connect the therapy bladder hose tubes to the Active Ice System hose tubes with the quick disconnect couplings. Depress the tab on the female coupling first then press the bladder couplings into the system couplings. Couplings "click" when they are properly locked together.

e) If the optional temperature control was purchased it should be connected between the system hose and the bladder using the quick disconnect couplings. Connect as described above.





Temperature Control Attachment (optional)

f) Plug power supply into the unit and into a wall outlet. Ensure all connections are securely seated.

g) If the optional battery pack and charger was purchased then it should arrive fully charged. The battery pack has two cords. One is labeled "To Cooler" and the other "To Charger." Use the one cord to plug into the cooler to run the unit off the battery pack and use the other cord to connect to the included charger for charging purposes only. **Only one cord is in use at any time.** To charge battery pack, plug in the cord labeled "To Charger" into the charger and plug into the wall. When unit is charging a red light is shown. Once battery pack is charged, a green light will show. The battery pack will run the unit for approximately 6 hours.

h) Lay the bladder on a flat surface and turn the timer knob clockwise to turn the unit on. Water will begin circulating through the bladder and back into the cooling reservoir via the return flow tube. Allow the unit to run several minutes before securing the bladder to the target body part. This will ensure good flow through the system. Always ensure that there is water flowing out of the return tube into the cooling reservoir.

i) Use the enclosed elastic belt with hook and loop tabs to hold the universal bladder comfortably on the target body part. (See "Using the Universal and Rectangular Bladder with the 3" x 44" Belt" section on page 4 in this manual for proper fit with elastic belts.) *CAUTION: Always use an insulation barrier* (such as Webril, Kerlix, cast padding, or elastic bandage) *between the therapy bladder and the skin.* 

If using the optional compression wrap(s), see "Using the Universal Bladder with the Optional Compression Wraps" on page 5.

j) When the water temperature has risen above the desired level, refill the reservoir with ice and water. (See steps 'b' and 'c'.) Drain water if necessary.

 ${\sf k})$  Confirm that water is flowing out of the return flow tube at the top of the cooler when the system is on.

## **Skin Inspection**

Inspect the skin under the universal bladder as prescribed, typically every 1 to 2 hours. Do not use this system if dressing, wrapping, bracing, or casting prevents skin checks. *CAUTION: Stop use and contact your practitioner immediately if you experience any adverse reactions, such as increased pain, burning, itching, increased swelling, blisters, increased redness, discoloration, welts, other changes in skin appearance, or any other reaction identified by your practitioner.* 

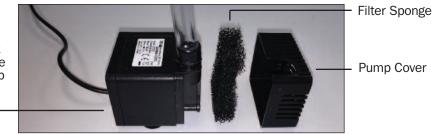
## Ending Session

Turn the unit off and disconnect the power supply. Depress the tabs on the female couplings and gently pull the therapy bladder hose tubes from the system tubes. Empty the reservoir and wipe out after each use.

## Care and Maintenance

Empty and wipe out cooling reservoir after each use. When necessary, wipe cooling reservoir and hoses with warm, antibacterial soapy water. Once every 2 weeks, pour 16 ounces of Isopropyl (Rubbing) Alcohol in the reservoir with the ice and water while system is in use. Periodically check the pump filter sponge and clean it or replace it. Do this by grasping the back of the pump and pulling the pump cover off. Then remove the black filter sponge. Clean and replace.

Back of the pump



**Cleaning and Extended Storage** 

Note: It is not possible to remove all of the water from the system and tubing, therefore before extended storage follow these instructions.

- a) When you have finished all of your cold therapy treatments, prior to extended storage, fill the reservoir with water to the fill line and add 2 tablespoons of liquid bleach to the water and mix. This will help keep the system clean.
- b) Connect the bladder to the system and turn the unit on.
- c) Allow the water mixture to circulate for 5 minutes.
- d) Turn unit off and unplug the power supply.
- e) Carefully drain the water mixture out of the unit and store in a cool dark place leaving the lid slightly open. (Exposure to sunlight and extreme heat may damage hoses and unit.)
- f) When reusing the unit after extended storage, remove the filter sponge from the pump motor and clean or replace. Then fill the reservoir with clean water, connect the old bladder and turn the pump on to circulate the water through the hose and bladder and flush the remaining water mixture out of the system (use old pad for this procedure, discard the pad after cleaning is completed). *A new bladder pad should be purchased when using the system after extended storage.* A new filter sponge and bladder pad may be purchased from Polar Products Inc. Call 800.763.8423 or order on our website at www.polarproducts.com
- g) Dispose water and refill the reservoir with fresh ice and water. Follow the operating instructions in this manual before use.
- h) Before you use the unit, inspect hoses and new pad for any tears or breaks. Contact Polar Products Inc. to obtain new therapy bladder pad and filter.

# Using the Universal and Rectangular Bladder with the 3" x 44" Belt

NOTE: For use only with the Active Ice® System manufactured by Polar Products, Inc.

WARNING: Read and follow ALL Instructions, Cautions and Warnings provided with the Active Ice<sup>®</sup> System before using this bladder or operating the therapy system. This product must be used in accordance with all instructions provided with the system. Polar Products, Inc. will not be liable for injuries that result from misuse or misapplication of this system.

# **CAUTION:** Always wear a protective layer of fabric between the universal bladder and the skin.

## Use an additional insulation barrier over a sterile dressing that does not completely protect the skin. Never use this non-sterile universal bladder directly on the skin.

Position the bladder on the target body part with the smooth side toward the body.

Attach one side of the belt to the bladder, then wrap the belt around the bladder and body part "Ace Bandage" style and then attach the other side of the belt to the bladder or the belt. The belt and the bladder are loop compatible and the hook tab will attach. Adjust the belt for comfort.



## CAUTION: Do not over-tighten the elastic belt(s) or pinch the tubes or bladder.

Be sure the hoses are not restricted or bent, as this will restrict water flow through the entire system.



## Using the Universal Bladder with the Optional Compression Wraps\*

If the optional compression wrap is being used, place the bladder in the compression wrap and secure the bladder to the wrap using the hook tabs sewn into the wrap.

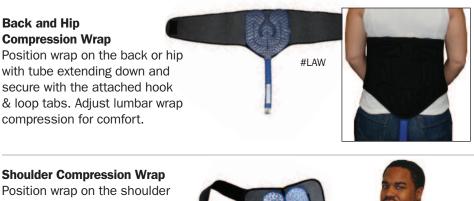
## Positioning the compression wrap on the body

#### **Knee Compression Wrap**

Position wrap on the knee with tube extending toward the foot. Adjust elastic bands for comfort.







Position wrap on the shoulder with tube extending down. The short, black elastic band secures the wrap to the arm, and the long, black strap goes around the chest. Adjust for comfort.



## CAUTION: Do not over-tighten the elastic belt(s) or pinch the tubes or bladder.

\*The optional compression wraps and other accessories may be purchased from our website or call us!

## WARRANTY AND SERVICE

Polar Products, Inc. warrants that the Active Ice<sup>®</sup> System is fit for use under the normal use for which it is intended and free of any defects in materials and/or workmanship for 180 days from the date of initial purchase.

Polar's obligation under this warranty is limited to the replacement or repair of any defective part(s) of this product. If you encounter a problem with your Active Ice<sup>®</sup> System, please call our Customer Service at 1-800-763-8423 to obtain a Returned Goods Authorization number (RGA.) To obtain warranty service on your system, please return the system, dated sales receipt (or packing list, as proof of purchase) and RGA number to: **Polar Products, Inc. 3380 Cavalier Trail, Stow, OH 44224**. Please include your phone number, any correspondence, and an explanation of the problem. Upon receipt, Polar's Service Department will determine the cause of failure and, if determined to be an issue covered by the warranty, will repair (or replace, as necessary) your system and return it to you, postage paid.

Please note: Health regulations prohibit us from accepting returns on cold therapy systems unless there is a problem with its operation (as covered by the warranty.) If the unit is within its 180 day warranty period, it will be repaired or replaced with a new unit. Couplings are a wear item and may need to be replaced. They are available for individual purchase.

## **TROUBLESHOOTING GUIDE**

If the possible solutions suggested below do not address your problem, please call our Customer Service department at 1.800.763.8423 and we will do everything possible to help.

**NOTE:** Never run the pump without water flowing through the lines! This will cause pump failure.

## IF THE PUMP IS NOT RUNNING

Check the wall outlet to assure there is power to the unit. Confirm that all power cords are properly plugged in and seated.

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## IF THE THERAPY BLADDER IS NOT GETTING COLD

FIRST: Is water flowing out of the top water return tube in the cooler?

## If water is NOT flowing out the top water return tube or it is flowing weakly:

- · First: repeat set up steps on pages 1 through 5
- If the optional temperature control attachment has been purchased with the system: Ensure that the temperature control knob is turned to maximum cold ("COLDEST"). Always adjust the control knob to ensure there is a flow of water from the top water return tube.
- Check the filter sponge and be sure it is clean and unobstructed. See instructions on page 3.



Water Return Tube

Pump

- Check the water level in the cooler. Confirm that the pump is completely submerged in the water.
- Check for kinks. Ensure there are no kinks in the hoses, insulated tubing or therapy pad.
- Adjust the belt. Ensure that the belt(s) holding the therapy bladder to the body are not too tight and impeding flow.
- Check for obstructions. Turn the system off. Disconnect couplings to ensure there is not an obstruction. Remove anything lodged in the coupling or tubing. Also ensure there is no obstructions at the bottom pump intake in the reservoir.
- Check the couplings. Confirm that the bladder is properly connected. (Couplings should "click" when locked) Reseat connectors between the hose and the bladder. Turn the system off, disconnect couplings and reconnect. When connecting the couplings, be sure the metal tab on the female coupling is pushed in before trying to connect.
- Check the pump. Occasionally an air bubble can get lodged in the pump intake. The pump is held to the bottom of the reservoir with suction cups. Pull the pump off the bottom and turn the pump motor vertically to horizontally to dislodge any air bubble.
- Remove the bladder from the body and run the system with the bladder on a flat surface. If there is flow, put on the target body part while running.

**Troubleshooting Tip!** A good way to isolate the problem is to remove the couplings from the insulated tubing attached to the reservoir. To do this simply turn off the unit, pull off (or cut off) the couplings, place the end of the tubes over a sink and then turn the system on. If water flows freely, there is an obstruction in the coupling, bladder or bladder tubing. Couplings can become blocked with minerals, hair, etc. Use a paper clip to clear the blockage. A new coupling may be necessary. To reattach the couplings, simply cut the tubing back to unused tubing and push the coupling back into the tube.

## If water IS flowing out the top water return tube:

- Make sure the reservoir is filled with ice. Note the line inside the cooler.
- If the optional temperature control attachment has been purchased with the system: Ensure that the temperature control knob is turned to maximum cold ("COLDEST")



Turn knob to "Coldest"

#### If the unit is leaking at the connections:

If a leak exists, turn off the unit. Disconnect and reconnect the bladder couplings, make sure both sides are clicked in properly. When connecting the couplings ensure that the silver release clip platform on the female coupling is pressed down prior to insertion. *NOTE: Couplings have rubber "O" rings that can become worn and dysfunctional. Replacement couplings may need to be purchased from Polar Products.* 



Male Couplings



Female Couplings

## **CAUTIONS AND WARNINGS**

## CAUTION: To reduce the risk of adverse reactions and malfunction, the Active Ice® System must be used in accordance with all instructions. Read and follow ALL included instructions.

#### Use only under the direction and supervision of a licensed healthcare practitioner.

Patients first need to be assessed by and discuss treatment with their physicians for contraindications, risk factors, and medical history before using this product. If used improperly, use of the Active Ice® System could result in serious injury. Supervision may be necessary to ensure precautions are followed, especially with young children and the elderly. Adhere strictly to your doctor's instructions regarding use, treatment times, treatment frequency, settings, self-assessment and best practices regarding your specific condition.

## Contraindications – The Polar Active Ice® System should not be used on patients with the following conditions, including but not limited to:

- · History of cold injury, frostbite, or adverse reactions to cold application
- · History of injury or adverse reactions to treatment
- Special care monitoring must be provided for children, patients on prolonged therapy, unconscious or incapacitated patients, patients with diabetes, and those with poor circulation
- Application areas with compromised local circulation
- · Potential wound healing problems, including those from multiple surgical procedures
- Circulatory syndromes such as Raynaud's disease, Buerger's disease, peripheral vascular disease, vasospastic disorders, sickle cell anemia, and hypercoagulable clotting disorders
- Local tissue infection
- · Hand/wrist or feet/ankle surgery with polyneuropathy
- Unconsciousness or incoherence due to any reason.
- Polyneuropathy or other nerve damage

#### Risk Factors for Cold-Induced Injury – Including but not limited to:

- · Pathological sensitivity to cold
- Young children and the elderly
- Behaviors that negatively affect circulation, such as poor nutritional habits, using tobacco, caffeine abuse, and alcohol abuse
- · Cognitive impairment and use of medications that negatively impact mental capacity
- · Patients with diabetes
- · Application area desensitization due to local anesthesia or regional nerve blocks
- Medications that have a negative effect on peripheral vascular circulation: beta adrenergic blockers and localized epinephrine
- · Excessive moisture at the application site
- Hand/wrist or feet/ankle surgery
- · Communication barriers that would cause improper use of the system

#### WARNING:

- The Active Ice® System can seriously injure skin if used improperly
- Follow ALL instructions to ensure product safety for patients and medical professionals
- · If you are pregnant, please consult your healthcare practitioner prior to use
- · If you have sensitive skin, or skin sensitivity, please consult your healthcare practitioner
- · Active Ice® system should be kept out of reach of infants and children
- Do not use while asleep
- The Active Ice® System should not be used by an invalid, unconscious person or a person with low blood circulation without supervision
- · Do not leave system unattended when operating
- · Discontinue use if you experience persistent discomfort or a rash
- · Monitor patients skin condition during therapy (every 20 minutes)
- · The system should not be applied to cancerous lesions, wounds, infected areas or open sores
- Never unplug by pulling on the connecting cords
- Turn off when not in use
- Patients should use extreme caution when using unit and should monitor skin conditions underneath pad every 20 minutes. It is recommended to take rest time from treatments. Always follow your healthcare practitioner's directions.

#### CAUTION: The Active Ice® System can seriously injure skin if improperly used. Follow all instructions to ensure patient safety.

## Polar Active Ice<sup>®</sup> Cold Therapy System (#AIST) Accessories

#### Easy to use Lithium-ion battery pack (BPL)

for portable use of our Active Ice® System.

- Includes 1.5A charger.
- Operates up to 6+ hours on a single charge!
- Compact, lightweight and easily transportable.
- · Easily added to existing units with included hook and loop attachments.

## The Active Ice<sup>®</sup> Double Universal Therapy System

offers convenient cold therapy to two parts of the body simultaneously. Convert your existing AIS unit or buy a new system. Call for details.

## The Active Ice<sup>®</sup> Head Cap (#AIS-H)

has a comfortable, snug fit and provides effective cold therapy to the head. Will work with a standard AIS system! Provides cooling relief to the head by continuously circulating cool water throughout the cap. Ease the pain of migraines with cold therapy!

#### Power take off adapter

works with standard car power outlets and plugs right into the AIS unit.

**Replacement couplings: The O-ring can** wear over time and cause leaking. These are easy and economical to replace.

#PTOA

Male #CM

Female #CF











# POLAR PRODUCTS

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800-763-8423

polarproducts.com