



Congratulations on your new CycleChillers Backpack Cooling System. The start-up instructions below will guide through your first use and provide a description on how to use the Ice Bladder.

Detailed descriptions are below for your first use. The tasks are not difficult and will be easy after trying them one time. So jump in and have fun setting up your new cooling system. The Backpack was designed to be straight forward and rugged.

FIRST USE:

- 1) ***Charge the battery*** – the 7.4V Lithium Ion battery and charger are inside the Backpack
- 2) ***Plug in battery with the Backpack power connector.*** Find the backpack power connector (a small connector that looks like the end of the charger) – it is inside the backpack on a black wire.
- 3) ***Fill bladder with ice cubes and then add water*** – water needs to be above the bottom white quick connect. The bottom quick connect is the tube that goes to the pump. If there is not enough water to cover the water intake the pump cannot circulate water into the vest.
- 4) ***Attach bladder with Backpack Quick Connects.*** When correctly attached the connector will ‘Click’ into place. There are two hoses inside the backpack – the shorter hose goes to pump and is attached to the bottom quick connect, the longer hose attaches to the top connect and returns water from the vest.
NOTE: When using a frozen bladder, do not force the connector to ‘click’ - but RUN WATER on the bladder quick connect until the ‘click’ happens easily. Forcing the connection can break the small spring that is the shut off valve control for the quick connect. The part that keeps you from getting drenched when unplugging the bladder...you like this part, don’t force it!
- 5) ***Strap in the bladder*** with the Velcro straps – so the bladder will not accidentally fall out.
- 6) ***Zip Backpack*** – slowing zip one or both zippers. Closing gap with your other hand to aid zipper.
- 7) ***Put on vest*** – Adjust elastic on vest sides so the fit is SNUG and stretched, but not uncomfortable. The tighter stretch is needed for contact between tube and your body. The thermal exchange happens because of this contact.
- 8) ***Hang Backpack on LEFT shoulder*** – both quick connect for vest and backpack are on the left side. By hanging Backpack on the left shoulder, it holds the connects in the correct place and make is easier for you to have both hands free to connect everything.
- 9) ***‘Click’ backpack and vest connection together.*** Surprisingly, it is easy to forget this step when you have used cooling system a lot. If you don’t feel the cool circulating – did you connect up?

NOTE: IF the hose connect is not complete – the pump will NOT WORK, so the water pressure is not built up in the hose with no place to circulate. There must be a complete circulation to debug any issues and for the cooling system to work.

- 10) ***Slide right arm through right backpack strap*** and connect all position straps – waist & chest
- 11) ***Click ON/OFF button*** - ON/OFF switch is small box with button on right shoulder strap. You will feel the coolness move around your body in seconds. 😊



The ICE Bladder is the key to good circulation and cooling duration. If the water has a good flow over the ice, it cools the ice and you. Poor flow over the ice and the pump will be starved for water so you will not feel cold water in the vest. Freezing the ice will give you a 50% longer cooling duration than good ice cubes. Many gas station ice cubes are mostly water and not solid ice so you get varying ice cooling duration. You will now become a connoisseur of good ice.

ICE Bladder Instructions:

To freeze the bladder:

- 1) **Fill bladder with water to the Fill line** – Fold top over so ridges show on both sides. Slip black bladder slide back across the top to the bladder with ridges facing out - to lock shut.
- 2) **AIR BUBBLE POSITION DURING FREEZE IS A KEY TO SUCCESS.** The air bubble is actually a key part of the bladder design. Lay bladder on side with the two quick connects facing up. Secondly, move the air bubble under the connects – this creates a cavity below the inflow and outflow so ice does not block water circulation.
- 3) **Freeze bladder overnight or longer** -the ice will expand so the bubble allows space for expansion.
- 4) **Pull frozen bladder out and run water on two quick connects** - A small amount of patience on this step will make life easier later. **A good way to tell if quick connects are ready is whether you can 'gently rock the quick connect' so it is free from being attached to the block of ice.** You are not melting the ice in step 4 – just warming the connect for backpack attachment.

AS BEFORE - NOTE: When using a frozen bladder, do not force the connector to 'click' - but RUN WATER on the bladder quick connect until the 'click' happens easily. Forcing the connection can break the small spring that is the shut off valve control for the quick connect. The part that keeps you from getting drenched when unplugging the bladder...you like this part, don't force it!

- 5) **Measure your success** – Place bladder in backpack. Did you get an easy 'click' from quick connect or did you have to force the darn thing to connect. IF you did NOT hear and NOT feel the click..there is a good chance you are stopping again to re-attach after comes undone.

ICE Cubes in the bladder:

- 1) **Fill with ice cubes and water** – water must be above bottom quick connect for circulation. **Bladder shut top is tight to keep water from leaking while riding**– Too make ice loading easier, roll a cardboard funnel – it will hold open the top while ice is loaded. Pour ice in the funnel or bladder with a cup.