

# **Cryospring Cold + Hot Plunge System User Guide**

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# **Unboxing / Parts List**

Begin by carefully unboxing your portable tub and chiller and ensure that all components are present (see below). If you are missing any items, please contact us at <a href="https://heloocryospring.com">heloocryospring.com</a> before proceeding.

NOTE: We recommend keeping all boxes and packing material in case you need to make a return or send your product(s) in for a warranty claim.

#### **Tub box contents:**

- 1. Tub with synching strap
- 2. Tub lid
- 3. Air pump/vacuum with hose
- 4. Backpack
- 5. Skimmer net
- 6. Repair kit (contains: chrome tub outlet shutoff valve, thread tape, black suction safety screen\*, brass garden hose adapter fitting, tub patches, air valve tool)

## **Chiller box contents:**

- 1. Chiller
- 2. Hoses (2)
- 3. Strainer housing (V1 chillers with externally mounted strainers ONLY)
- 4. Mesh strainer (V1 chillers with externally mounted strainers ONLY)
- 5. Pleated main filters (2)
- 6. Filter housing wrench
- 7. Extra hose gaskets

NOTE: The tub suction safety screen is only included with tubs as part of the Cold + Hot Plunge System. If you purchased your tub separately, this part will not be included as it is not needed for ice bath use. If you later purchase our chiller to add to your tub, please contact us and we will include it with your chiller purchase.



# <u>Setup</u>

## Select a location for your plunge

The location must:

- 1.1. Be wet-safe. Avoid locations that may be damaged by water exposure.
- 1.2. Have access to a water hose spigot or sink faucet with garden hose adapter (not included) and a dedicated 110v/60Hz, 15 amp grounded electrical outlet.
- 1.3. Be smooth, level, and free of objects that could potentially puncture or otherwise damage the tub and/or chiller.
- 1.4. Support the weight of a filled tub + chiller (~1,250lbs) in addition to the weight of the user(s) and any other items (furniture, etc.).
- 1.5. Provide adequate space around the chiller for proper airflow. There should be a minimum of 12 inches of clearance around the chiller.
- 1.6. Provide adequate space around the tub to access the air valve, water inlet/outlet hose connections, lid buckles, and unobstructed user entry. We recommend leaving a minimum of 1 foot of clearance at the front/back and sides of the tub.

NOTE: For outdoor installations, install the tub and chiller under a covered area for product longevity. The limited warranty does not cover damage caused by direct exposure to the elements.

### Inflate the tub and lid

- 1.7. Attach the air pump hose to the air pump by screwing the threaded female hose end onto the threaded male pump outlet labeled "out".
- 1.8. Remove the air valve cap from the tub.
- 1.9. Ensure that the pin in the center of the valve is fully extended in the "out" position by pressing it and noting the position.



- 1.10. Firmly press the pump hose end into the air valve and turn clockwise until the hose end is firmly seated. You may need to adjust the hose so it stays in place while pumping.
- 1.11. The pump has a small removable plug attached by a keeper string at the top of the pump body. This plug turns the pump from a high-volume pump (plug inserted) to a high-pressure pump (plug removed). Keep the plug inserted for faster pumping and remove when pumping becomes labored.
- 1.12. Inflate the tub until the pressure gauge at the top of the pump reads 10psi.

Note: The pump will not register pressure until the tub is sufficiently filled - keep pumping until the gauge reads 10psi.

WARNING: Do not over inflate the tub or lid as irreparable damage may occur.

- 1.13. When done inflating, release the pump hose with a quick counterclockwise quarter turn while gently pulling on the hose.
- 1.14. Replace the valve cap.
- 1.15. Repeat steps 1-8 for inflating the tub lid.

## Attach the chrome tub outlet shutoff valve

- 1.16. Remove the tub outlet shutoff valve (chrome with black handle) and plumber's tape from the orange tub repair kit.
- 1.17. Ensure that the shutoff valve has a gasket inserted into the female end.
- 1.18. Remove the cap from the tub water outlet (marked in RED) and apply a small amount (1-2 turns) of plumbers tape to the threaded end of the tub water outlet.
- 1.19. Attach the tub shutoff valve to the tub outlet by screwing the female threaded end of the shutoff valve onto the taped male end of the tub water outlet. **HAND TIGHTEN ONLY.**
- 1.20. The valve is CLOSED when the handle is perpendicular to the valve body. The valve is OPEN when the handle is parallel to the valve body.

## Attach the black tub outlet suction safety screen

- 1.21. Remove the black suction safety screen from the orange tub repair kit.
- 1.22. Attach the suction safety screen by screwing it clockwise into the tub outlet on the inside of the tub. **HAND TIGHTEN ONLY.** The tub outlet is



located on the lower left of the tub when facing the tub from the front and is marked in red on the outside of the tub.

#### Connect the chiller to the tub

- 1.23. Unscrew and reserve the protective white caps from the water inlet and outlets marked in red and green on the back of the chiller.
- 1.24. **V1 Chillers with externally mounted mesh strainer ONLY:** Screw the mesh strainer fitting water inlet marked in red on the back of the chiller. Then, screw the strainer housing clockwise over the mesh strainer fitting onto the male threaded water inlet.

WARNING: The mesh strainer must be checked and cleaned regularly to prevent water flow issues and possible chiller damage. If you experience decreased water flow from your tub outlet, check and clean the mesh strainer first, followed by the main filter if proper flow does not resume.

1.25. Ensure each chiller hose end has a gasket inserted before screwing one end onto the water inlet of the chiller (red) and the other end onto the water outlet of the tub (red). Repeat with the other hose, screwing one hose end to the water outlet of the chiller (green) and the other to the water inlet on the tub (green). **HAND TIGHTEN ONLY.** 

#### Fill the tub with water

1.26. Attach one end of a garden hose (not included) to a garden hose spigot or faucet with a garden hose adapter (not included) and place the other end into the tub.

WARNING: Only use fresh tap water to fill your tub. Extended use of water with high mineral content (hard water) may require more frequent chiller maintenance flushing to prevent scale buildup and diminished chiller performance.

- 1.27. Fill the tub with water until the water level covers the lower water outlet of the tub. Check the water outlet and valve for any leaks before continuing to fill. If no leaks are detected, move on to the next step.
- 1.28. Continue filling the tub until the water level is approximately four inches below the water inlet to prevent spill-over during your first plunge. After



your first plunge, you may add or remove water to achieve your desired water level.

## Prepare the chiller

Ensure the chiller filter housing is equipped with a fresh filter and make sure the filter housing is hand-tight.

Warning: HAND TIGHTEN ONLY. The filter housing wrench should only be used to loosen the filter housing.

Open the tub outlet water shutoff valve by turning the handle counterclockwise until it is parallel to the valve body and water is able to freely flow from the tub to the chiller.

WARNING: Do not power on the chiller before performing this step. Chiller damage may occur if the chiller is run dry for an extended period of time.

Plug the chiller into a dedicated (with nothing else plugged in) 110v/60Hz 15 amp grounded outlet.

Test the GFCI functionality.

ELECTRIC SHOCK WARNING - Do not proceed if the GFCI test fails. Injury or death may occur from using the plunge with an improperly grounded chiller.

Turn the chiller on by toggling the power switch on the back of the chiller (if equipped) and press the power button on the touch screen.

The chiller will automatically begin purging air from the system before water begins to flow freely into the tub from the water inlet. This process may take a few minutes.

Check for tub and chiller leaks.

## Cool or heat the plunge

With the chiller powered on and water running freely from the tub water outlet:

For V1 Chillers with externally mounted mesh strainers



- 1.1. Press the [S] button. "Set" and the current temperature setting will flash.
- 1.2. Press the up or down arrow buttons until you reach your desired target temperature.
- 1.3. Press the [S] button again to select your temperature setting.

#### For V2 Chillers with internally mounted mesh strainers

- 1.4. Use the temperature slider or the +/- buttons to adjust your target temperature.
- 1.5. Secure the lid to the tub with the locking buckles. The initial lid buckle code is set to "0-0". The lid will further insulate the tub for more efficient cooling/heating

# **Chiller Control Panel Operation**

## V1 Chillers (with externally mounted mesh strainer)

#### Display:

System - Current mode (Blank = Circulating, Cool = Cooling, Heat = Heating)

Defrost - On/Off (not user adjustable)

Mode - Default (not user adjustable)

Upper Temperature - Current water temperature

Lower (Set) Temperature - Current target temperature

Lower Left Number - Current flow rate in liters per minute

#### **Button functions:**

I/0 - Press to power on/off.

Four Squares - Press and hold to switch between Celcius/Fahrenheit.

S - Press to change target temperature. Press again to set target temperature.

W - Press and hold to join WiFi.

Up/Down Arrows - Press or hold to change target temperature after pressing "S".



Ozone Adjustment - Press S then W and use the up/down arrows to adjust the ozone system from 0 (off) to 3 (on for 3 minutes every 15 minutes).

Screen Lock/Unlock - Press and hold the Up/Down arrows together.

## **V2** Chillers (with internally mounted mesh strainer)

#### **Upper Display:**

WiFi - Highlighted when WiFi is connected.

Ozone - Highlighted when ozone is functioning.

Cooling - Highlighted when cooling.

Heating - Highlighted when heating.

Defrosting - Highlighted when defrosting.

#### **Button Functions (Main Screen):**

Unlock/Lock - Press and hold to unlock/lock the display panel.

Water Flow - Current flow rate in liters per minute.

Settings - Press to enter the settings menu.

Switch - Press to power on/off.

#### **Button Functions (Settings Screen):**

Power On: Press to toggle chiller auto-start (automatically turns on when powered).

Sound: Press to toggle button sounds on/off.

Temperature: Press to toggle between Celsius and Fahrenheit.

?: Press to view the chiller software version.

Ozone Time: Adjust from 0 (ozone off) to 5 (ozone runs for 5 minutes every 15 minutes).

Screen Brightness: Adjust the brightness of the display.

Screen Sleep: Adjust how long the screen stays on before going into sleep mode.

Screen Lock: Adjust how long the screen is active before locking.

WiFi: Press and hold to connect to WiFi.



# <u>Takedown / Storage</u>

#### Drain the tub

NOTE: You may want to have a towel handy to catch any water spills during this process.

#### Option 1 - Garden hose tub drainage

- 1. Disconnect the chiller (skip to step #2 if you are using the tub without the chiller)
  - 1.1. Turn the chiller off by toggling the power switch on the back of the chiller.
  - 1.2. Close the tub outlet valve by turning the handle clockwise until it is perpendicular to the valve body.
  - 1.3. Disconnect the chiller inlet hose (marked in red on the tub and chiller) from the tub.
- 2. Attach the brass garden hose adapter from the orange tub repair kit to the chrome tub outlet shutoff valve.
- 3. Attach a garden hose (not included) to the garden hose adapter fitting on the tub until it is hand-tight. **HAND TIGHTEN ONLY.** Place the other end of the garden hose where you want the tub water to be drained. **Note: The garden hose must be lower than the water level in the tub in order for the tub to drain.**
- 4. Open the tub outlet valve by turning the handle counterclockwise until it is parallel to the valve body.
- 5. Once the tub water has drained below the level of the water outlet, the tub will need to be tilted in order to drain the remaining water.

WARNING: Use caution when tilting the tub. Tub damage may occur if the tub is tilted too aggressively against the water outlet and attached garden hose.

6. Remove the garden hose and garden hose attachment fitting from the tub by unscrewing them counterclockwise.

WARNING: To prevent tub damage, firmly hold the water outlet valve in place while unscrewing the garden hose and garden hose attachment fitting.

7. Remove any remaining water by turning the tub over.



#### Option 2 - Chiller pump tub drainage

- 1.1. Turn the chiller off by toggling the power switch on the back of the chiller.
- 1.2. Close the tub outlet valve by turning the handle clockwise until it is perpendicular to the valve body.
- 1.3. Disconnect both chiller hoses on the tub side by unscrewing the fittings counterclockwise. Note: You may want to have a towel handy to catch any water that spills from the chiller hoses.
- 1.4. Place the loose end of the chiller hose that is attached to the chiller inlet (red) into the tub so that it lays on the bottom of the tub with no obstructions to the hose opening.
- 1.5. Place the loose end of the chiller hose that is attached to the chiller outlet (green) where you want the tub water to be drained.

# WARNING: Do not attempt to extend either chiller hose by adding additional hoses, piping, etc. as chiller damage may occur.

- 1.6. Turn the chiller on by toggling the power switch on the back of the chiller and pressing the power button on the touch screen if needed. The chiller will first purge any air in the system before water begins to flow from the outlet hose.
- 1.7. Monitor the water level in the tub and adjust the chiller hose and tub angle as needed to keep the chiller hose submerged at all times until the tub is fully drained.
- 1.8. When the tub is fully drained, immediately turn off the chiller by toggling the power switch on the back of the chiller. **WARNING: Running the chiller dry may damage the chiller.**

#### Deflate the tub and lid

- 1. Thoroughly dry every surface of the tub and lid by wiping them with a clean towel. **NOTE: Do not store the tub and lid while they are wet to prevent the formation of mold/mildew.**
- Remove the air valve caps from the tub and lid and firmly press the center pins on the air valves to the fully depressed "in" position to release the air.
  NOTE: The air in the tub and lid is under high pressure and will make a loud noise when deflating.
- 3. Press down on the tub and lid to remove any remaining air before pressing the center pins on the air valves so that they return to the fully extended "out" position. This will prevent air from reentering the tub/lid.



- 4. **Optional:** To make the tub and lid more compact for storage, you may use the included pump to vacuum the air out.
  - 4.1. Unscrew the air hose counterclockwise from the "OUT" side of the pump and screw it clockwise onto the "IN" side of the pump to turn the pump into a vacuum.
  - 4.2. Ensure that the air valve center pin is in the fully extended "out" position before firmly attaching the hose to the tub or lid air valve with a clockwise quarter turn.
  - 4.3. Use the pump as normal to vacuum any remaining air from the tub and lid. You will see the tub/lid shrinking as it is being vacuumed.
  - 4.4. Once you are unable to remove any more air from the tub/lid you may remove the air pump hose from the air valve and quickly press the air valve back into the "OUT" position.
- 5. Replace the air valve caps on the tub and lid.

## Pack the tub, lid, and air pump

- 1. Fold the front edge of the tub with the Cryospring logo on it inward so that it lies flat against the inside floor of the tub.
- 2. Fold the back edge of the tub with the water inlet/outlets facing out over the top of the front edge of the tub.
- 3. Fold the tub into thirds, longways, being careful not to damage the water inlet/outlet.
- 4. Wrap the synching strap around the folded tub and tighten to keep it from unfolding.
- 5. Fold the lid into thirds, longways.
- 6. Place the tub into the backpack, followed by the lid, followed by the air pump and detached air hose.
- 7. Store in a dry, sheltered area.

## **Drain and store the chiller**

NOTE: You may want to have a towel handy to catch any water spills during this process.



- 1. Disconnect both chiller hoses from the chiller.
- 2. Remove the water filter housing. If the housing does not want to turn by hand, you may use the included filter housing wrench.
- 3. Remove the water filter from the filter housing. If the filter is still clean, reserve it for future use.
- 4. **(V1 chillers with externally mounted mesh strainers ONLY)** Remove and reserve the strainer housing and strainer from the chiller inlet (red).
- 5. Carefully tilt the chiller backwards to drain any remaining water from the chiller inlet/outlet.
- 6. Attach the protective white chiller inlet/outlet caps.
- 7. Insert a dry filter into the filter housing and reinstall the filter housing onto the chiller by turning the housing clockwise until it is hand tight. NOTE: Do not use the filter wrench to tighten the filter housing. HAND TIGHTEN ONLY. Do not store the chiller with a wet filter to prevent the formation of mold/mildew.
- 8. Store the chiller in a dry, sheltered area above 32°F/0°C.

WARNING: The chiller must be used and stored above 32°F/0°C to prevent chiller damage. Chiller damage caused by freezing conditions is not covered by the limited warranty.

# Setting a new lid buckle lock combination

- 1. The original buckle lock combination is set to "0-0"
- 2. To change the combination:
  - 2.1. Depress the pin located on either side of the buckle with a small tool such as a jeweler's screwdriver, pen tip, paperclip, or toothpick.
  - 2.2. With the pin depressed, rotate the number dial on the same side as the depressed pin until your desired number appears. Release the pin and your number is now set.
  - 2.3. Repeat processes i-ii on the other side of the same buckle.
  - 2.4. Repeat processes i-iii on the buckle on the other side of the lid.



# Setting up the Tuya Smart mobile app

NOTE: The Tuya Smart app only works with 2.4 GHz wireless networks. If your wireless networks utilize 5 GHz dual band frequencies it will need to be configured to 2.4 GHz to allow your Cryospring Smart Chiller to connect. Please contact your Wi-Fi router manufacturer for support.



1. Download the Tuya Smart application onto your mobile device by scanning the QR code above or visiting:

#### Apple:

https://apps.apple.com/us/app/tuya-smart/id1034649547

#### Android:

https://play.google.com/store/apps/details?id=com.tuya.smart&hl=en US&gl=US

- 2. Make sure the mobile device you are using to set up your chiller is connected to the same wireless network as you intend the chiller to be on.
- 3. Make sure the mobile device has Bluetooth enabled.
- 4. Open the Tuya Smart application.
- 5. Follow the prompts for registering and selecting a home location name.
- 6. Add the Cryospring Smart Chiller by selecting "Add Device" on the home screen.
- 7. Follow the prompts for confirming your wireless network and password.
- 8. With the chiller turned on, press and hold the "W" (V1 chillers) or "Wifi" (V2 chillers) button on the chiller's touch panel until the Wi-Fi symbol flashes on the display screen.



- 9. The Tuya Smart application will now attempt to connect to the Cryospring Smart Chiller. If this step fails, make sure you are on a 2.4 GHz network and you have Bluetooth enabled on your mobile device.
- 10. When connected successfully, you will now see the Cryospring Smart Chiller as a selectable device on your home screen.

# **Maintenance - READ CAREFULLY**

NOTE: All maintenance intervals are based on 1-2 regular users (3-5x per week). You should always enter your cold plunge clean (rinsed off). For additional users, adjust maintenance intervals accordingly.

The key to a well running cold plunge chiller and clean plunge water is maintaining good water flow. To ensure good water flow, follow the steps below:

## Mesh filter cleaning

- For V1 chillers with externally mounted mesh strainers check and clean the mesh strainer WEEKLY to ensure it is not obstructed by debris.
  - 1. On V1 chillers, the mesh strainer is located inside a metal housing attached to the chiller inlet on the back of the chiller.
- ii. For V2 chillers with internally mounted mesh strainers check and clean the mesh strainer MONTHLY to ensure it is not obstructed by debris.
  - 1. On V2 chillers, the mesh strainer is located inside the chiller behind a removable panel located behind the main filter. Once the panel is removed, the filter can be located just inside the chiller case on the right hand side while facing the panel opening. To remove the filter, unscrew the foam-insulated filter housing cap CLOCKWISE and remove the filter housing cap and mesh filter together through the panel opening.



## Main filter replacement

- iii. For all chiller models, we recommend replacing the main pleated filter MONTHLY.
  - 1. The main filter is located on the side of the chiller in a clear filter housing.

## Water quality maintenance

- iv. Your cold + hot plunge system is equipped with filtration and ozone sanitation to help keep your water clean. Without the use of a water sanitizer, you can expect approximately 2 weeks of use before needing to drain and refill your tub with fresh water. Your results may vary depending on usage and conditions.
- v. To extend water change intervals, we recommend using Sirona Simply sanitizer. Start with two capfuls and monitor sanitizer levels weekly using Sirona Simply test strips. Adjust sanitizer levels as necessary for your usage and conditions.