



Penguin Chillers
OWNER'S MANUAL

URGENT NOTICE

When first receiving the chiller AND anytime the chiller is moved without keeping the unit level. Let the chiller remain upright for at least 2 hours before plugging it in.

**Failure to do so will
result in damage!**

GENERAL CHILLER SETUP

Initial Cleaning:

We do our best to clean the chiller and parts throughout the build process, however we still recommend rinsing the chiller when first received to removed any possible oil/contaminate residue from the manufacturing process.

Locating the chiller:

All chillers work on the principal of removing heat from the water and transferring it to the air. The chiller needs ventilation. If the chiller is located in an overly hot or unventilated area, it can not dissipate heat efficiently and lowers the chiller's ability to cool. Enclosed small spaces like cabinets typically do not provide enough ventilation unless modified to do so. Ideal spacing is 6 inches on the sides and top of chiller and 12 inches on the back of the chiller where it exhausts air. Improper ventilation may overwork the chiller and can lead to premature failure.

Plugging the chiller in:

The chiller will operate on a standard 15amp 110v-120v circuit as long as it does not have other high amperage devices on it as well. Be sure to check the GFI plug to make sure it is not “tripped” and there is a green indicator light.

Cleaning:

If the rear coil becomes overly dusty you can use compressed air to clean the coil.

Air Filter (optional):

If you know your operating environment is particularly dusty/dirty you may opt to install an air filter. We recommend using the “hook” side of hook and loop fastener adhesive tape to secure a filter floss type of material over the air intake louvers of the chiller. Change filters as needed to maintain minimal airflow restriction.

WATER CHILLER SETUP

Water Chiller Specific Information

Connecting your chiller:

The chiller features 1" female threaded PVC fittings. Follow the Inlet/Outlet flow pattern as marked to ensure the controller functions properly. When tightening a fitting into the chiller, always use pliers on the exposed chiller fitting to hold back the torque that would otherwise be transferred to the internal components. We recommend using Teflon tape, and only finger tighten fittings. This is often more than enough to ensure that there are no leaks. Test the connection. If you need to use a wrench for tightening, only tighten 1/4 turn at a time before retesting the connection. **WE ARE NOT RESPONSIBLE FOR DAMAGE IF YOU OVERTIGHTEN THE CONNECTION.**

Flow:

Locate filters or any equipment that restricts water flow before the chiller. The outlet line should lead directly back to the tank without any back-pressure. We recommend 500gph – 1800gph pumps, minimum MEASURABLE flow should be at least 200gph. Do not run the chiller without flow.

Maintenance:

If you ever need to turn off your pump to clean a filter, or for any other reason – **UNPLUG THE CHILLER FIRST.** To clean the internals of the chiller you can use white vinegar. Fill a bucket with 1-2 gallons and use a pump to recirculate it through the chiller for a couple hours.

Water Pressure:

Chillers are not designed for pressurized use. Keep pressure below 10 psi for proper use.

GLYCOL CHILLER SETUP

Glycol Chiller Specific Information

Glycol Mix Ratio: If operating at 28F (brewing) it is most common to use 40%-50% glycol to water, this ensures that the glycol does not freeze. The cooling coils will be up to 20F cooler than the liquid bath temp, so keep this in mind when choosing what ratio to use if you plan on operating at a different temperature.

Glycol Fill Level: Fill to just above the coil, but below the copper lines that come through the wall of the container. The middle copper tube acts as a chase way for the temperature probe, if you over fill the tub with glycol, it will flow down this tube to the bottom of the chiller and out ultimately onto your table/floor/etc.

Temperature Probe: The temperature probe is fastened to the coil several inches from the end of the probe where the temperature is read. The end should hang away from the coil, in the glycol. Check to make sure the temperature probe is not touching the coil, this will give a false reading. It is also preferable to avoid positioning that would place it under a stream of warm glycol returning to the chiller as this could potentially also give false readings.

Temperature (for brewers): One of the most common set points for brewing is 28F, hence why glycol chillers are rated at this temperature. We would discourage you from setting it lower than this for brewing applications, colder is not always better. If set too cold, beer will freeze to your cooling coils and the ice acts as an insulator preventing proper heat transfer to the coils. We commonly see this problem when the chiller is set around 24F-25F, but occasionally 28F is still problematic depending on the alcohol content of the batch. If the glycol bath is at the set temperature but your batch has stalled out on cooling in the low to mid 40's, freezing is likely the issue. If you are having this issue try a set point of 32F-34F and walk it down a degree at a time.

CONTROLLER SETUP

*****PLEASE READ ENTIRE INSTRUCTIONS
BEFORE MAKING ADJUSTMENTS**

Buttons

Upon power up displays indicate current temperature.



Set Button-
Enters setting
mode



Reset/Exit Button-
Exits Setting mode



Up Arrow-
Scrolls
Temperature up



Down Arrow-
Scrolls Temperature
down



Flashing Snowflake- Unit calling for cooling,
waiting for 2 min time delay to elapse

Steady Snowflake- Unit is in cooling run mode

Programming

To adjust temperature set point:

1. Press and hold **SET** for 5 seconds
2. "St" will appear, press **SET**
3. Using **Up Arrow** and **Down Arrow** select desired set temperature.
4. Press **SET** to save change
5. Press **RESET** to exit setting



All chillers come with a 1 year warranty. Certain chillers are offered with an optional extended warranty for an additional charge. The length of warranty will be determined by your purchase, minimum of 1 year.

Penguin Chillers warrants the Chiller to be free from defects in materials and workmanship. The warranty term begins on the date of purchase. This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. Penguin Chillers' warranty liability extends only to the replacement cost of the product. Penguin Chillers will not be liable for any consequential, indirect, or incidental damages of any kind, including lost revenues, lost profits, or other losses in connection with the product. Some states do not allow limitation on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Penguin Chillers will, at our discretion, repair or replace the Chiller covered under this warranty. To request warranty service, please contact our technical support via email: support@penguinchillers.com.

If this product is returned to Penguin Chillers for repair the customer is responsible for shipping charges to get the chiller to Penguin Chillers. The chiller needs to be properly packaged for safe transport. This product must be insured during shipment. Customer assumes all risks of loss or damage during shipment. After receiving the package Penguin Chillers will repair or replace the chiller at our discretion. Penguin Chillers will repack and ship the chiller back to you at no additional cost within the continental 48 states, surcharges may apply outside of the continental 48 states. Penguin Chillers will not be responsible for any costs related to the removal or re-installation of this product from or into any installation. Penguin Chillers will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any installation cost of this product.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. TO THE MAXIMUM EXTENT PERMITTED BY LAW, PENGUIN CHILLERS SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF PENGUIN CHILLERS CANNOT LAWFULLY DISCLAIM OR EXCLUDE IMPLIED WARRANTIES UNDER APPLICABLE LAW, THEN ALL IMPLIED WARRANTIES COVERING THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THIS PRODUCT AS PROVIDED UNDER APPLICABLE LAW.

This limited warranty is void if (i) the label bearing the serial number of this product has been removed or defaced, (ii) the product is not distributed by Penguin Chillers or (iii) this product is not purchased from an authorized Penguin Chillers reseller. If you are unsure whether a reseller is an authorized or not, please contact us.

The background is a solid blue color with a complex, abstract pattern of overlapping, irregular polygons. These shapes vary in size and orientation, creating a textured, crystalline effect that resembles ice or a low-poly digital landscape. The overall composition is centered and minimalist.

We Know Cold.