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OWNER'S MANUAL

JBJ NANO ARCTICA
E-Chiller

Thermoelectric chillers for nano tanks

DBI-010 DBI-020

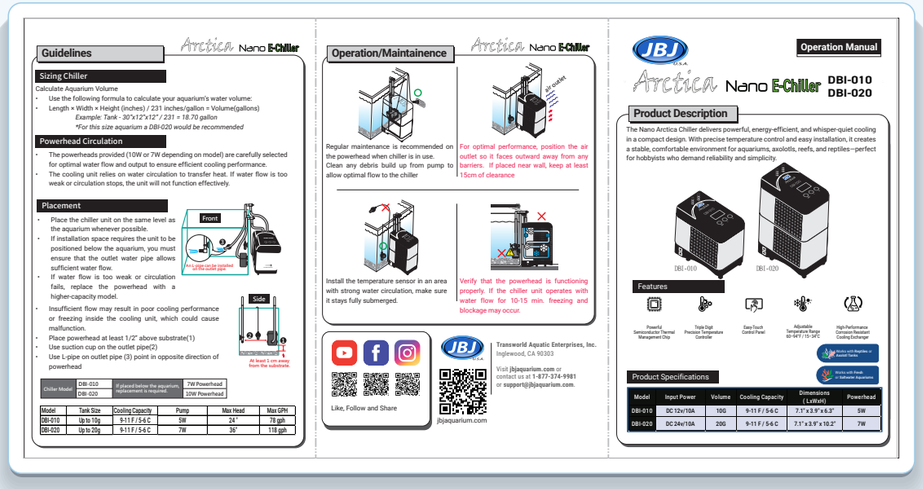
Questions about this model?

Text us 916-800-COLD (2653)

Parts checker | **Size calculator**

Details by email: Jbjnanocubes@gmail.com

Nano chillers ›



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Guidelines

Sizing Chiller

Calculate Aquarium Volume

- Use the following formula to calculate your aquarium's water volume:
- Length × Width × Height (inches) / 231 inches/gallon = Volume(gallons)

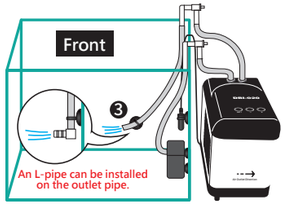
Example: Tank - 30"x12"x12" / 231 = 18.70 gallon

**For this size aquarium a DBI-020 would be recommended*

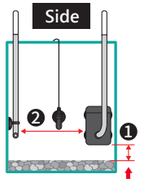
Powerhead Circulation

- The powerheads provided (10W or 7W depending on model) are carefully selected for optimal water flow and output to ensure efficient cooling performance.
- The cooling unit relies on water circulation to transfer heat. If water flow is too weak or circulation stops, the unit will not function effectively.

Placement



- Place the chiller unit on the same level as the aquarium whenever possible.
- If installation space requires the unit to be positioned below the aquarium, you must ensure that the outlet water pipe allows sufficient water flow.
- If water flow is too weak or circulation fails, replace the powerhead with a higher-capacity model.

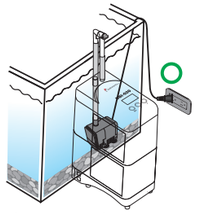


- Insufficient flow may result in poor cooling performance or freezing inside the cooling unit, which could cause malfunction.
- Place powerhead at least 1/2" above substrate(1)
- Use suction cup on the outlet pipe(2)
- Use L-pipe on outlet pipe (3) point in opposite direction of powerhead

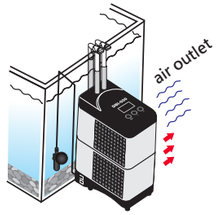
Chiller Model			
	DBI-010	If placed below the aquarium, replacement is required.	7W Powerhead
	DBI-020		10W Powerhead

Model	Tank Size	Cooling Capacity	Pump	Max Head	Max GPH
DBI-010	Up to 10g	9-11 F / 5-6 C	5W	24 "	78 gph
DBI-020	Up to 20g	9-11 F / 5-6 C	7W	36"	118 gph

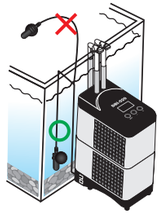
Operation/Maintainence



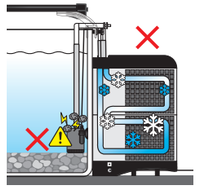
Regular maintenance is recommended on the powerhead when chiller is in use.
Clean any debris build up from pump to allow optimal flow to the chiller



For optimal performance, position the air outlet so it faces outward away from any barriers. If placed near wall, keep at least 15cm of clearance



Install the temperature sensor in an area with strong water circulation, make sure it stays fully submerged.



Verify that the powerhead is functioning properly. If the chiller unit operates with water flow for 10-15 min. freezing and blockage may occur.

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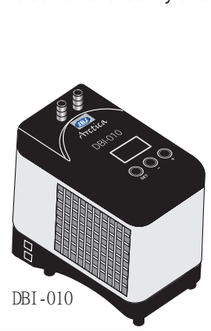
Operation Manual

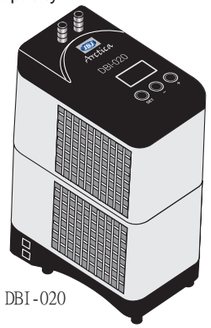
Arctica Nano E-Chiller DBI-010 DBI-020

Product Description

The Nano Arctica Chiller delivers powerful, energy-efficient, and whisper-quiet cooling in a compact design. With precise temperature control and easy installation, it creates a stable, comfortable environment for aquariums, axolotls, reefs, and reptiles—perfect for hobbyists who demand reliability and simplicity.



DBI-010



DBI-020

Features

- Powerful Semiconductor Thermal Management Chip
- Triple Digit Precision Temperature Controller
- Easy-Touch Control Panel
- Adjustable Temperature Range 60–94°F / 15–34°C
- High-Performance Corrosion Resistant Cooling Exchanger

Works with Reptiles or Axolotl Tanks

Works with Fresh or Saltwater Aquariums

Product Specifications

Model	Input Power	Volume	Cooling Capacity	Dimensions (LxWxH)	Powerhead
DBI-010	DC 12v/10A	10G	9-11 F / 5-6 C	7.1" x 3.9" x 6.3"	5W
DBI-020	DC 24v/10A	20G	9-11 F / 5-6 C	7.1" x 3.9" x 10.2"	7W

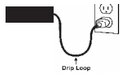
ARCTICA Nano E-Chiller – Safety & Operating Instructions

IMPORTANT: Read all safety instructions and notices carefully before use. Improper use may lead to serious injury or damage.

DANGER – Risk of Electric Shock
Because water is involved, special care must be taken when using aquarium equipment. Follow all precautions. Do not attempt to repair the chiller yourself. If any issues arise, return it to the place of purchase for service or dispose of it safely.

If the chiller shows any signs of damage, unplug it from the power source immediately.
Inspect the chiller thoroughly before and after installation. Ensure all components appear in proper working order.
Do not use the heater if:
The cord or plug is damaged.
It has malfunctioned.
It has been dropped or damaged in any way.
Note: The power cord cannot be replaced. If damaged, the chiller driver must be discarded. Do not cut or attempt to repair the cord.

Water Safety & Plug Protection
To prevent water from reaching the plug or outlet. Use a drip loop in the power cord—this is a U-shaped bend below the level of the outlet that stops water from traveling along the cord into the socket (see diagram).



If the plug or outlet gets wet:
Do not unplug the cord.
First, shut off power at the circuit breaker or fuse.
Then unplug and inspect the outlet for water.

Handling and Operation Safety
Always unplug all aquarium appliances before performing any maintenance.
Always pull the plug (not the cord) to disconnect. Unplug the heater when not in use.

Power Requirements
Use indoors only. Do not expose the chiller to weather or freezing temperatures.
Use only with GFCI (Ground Fault Circuit Interrupter) outlets for added protection.
If an extension cord is needed, make sure it is properly rated for the chiller's power requirements.
Arrange cords to avoid tripping or accidental pulling.

Intended Use Only
This aquarium chiller is designed specifically for aquariums. Do not use in:

Swimming pools
Garden ponds
Bathtubs or bathrooms
Any application other than aquariums
Using unapproved attachments may result in hazardous situations.

Child and User Safety
This appliance is not intended for use by children or individuals with limited physical, sensory, or mental abilities unless supervised by someone responsible for their safety.
Children must be closely supervised to ensure they do not play with the heater.

Temperature Settings & Indicators
Temperature Display: Shows current setting (e.g., 78°F).
Chiller Indicator: Lights up when the chiller is actively cooling.

SAVE THESE INSTRUCTIONS
Keep this guide for future reference and ensure all users of the heater have read and understood these instructions.

Please contact us:
- support@jbjaquarium.com
- 877-374-9981

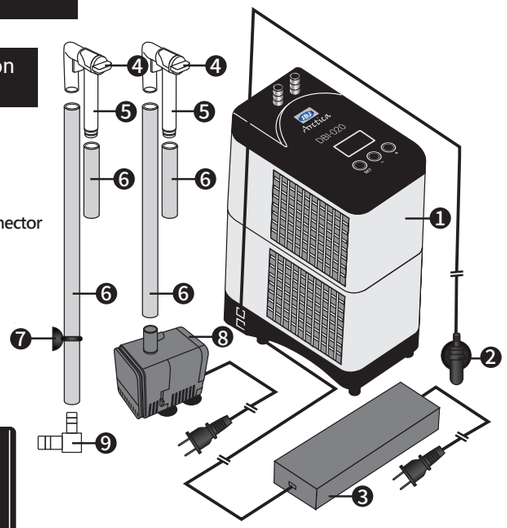
SCAN HERE
WARRANTY REGISTRATION

1 YEAR LIMITED WARRANTY
The NANO E-CHILLER is warrantied to the original purchaser against defects in material and workmanship for one year from the date of purchase. This warranty is limited to repair or replacement at the manufacturer's discretion and becomes void if the product is modified, misused, mishandled, or abused. It does not cover personal injury, property loss, or damages, and your rights may vary depending on state law.

Product Description

Accessory Instruction Diagram

1. Cooling Main Unit
2. Temperature Sensor
3. Power Supply
4. Adjustable Flow Knob
5. F-Type Water Hose Connector
6. 12mm Water Hose
7. Suction Cup
8. Powerhead
9. L-pipe



3-Digit Temperature Controller

10. Digital Control Panel
11. Set Button
12. Temperature Decrease Button
13. Temperature Increase Button

Temperature Control Range
10.1~34.0°C · 60~94°F

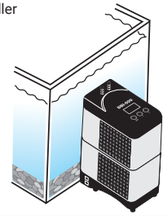
Temperature Setting Instructions

1. Auto Power-On Upon Power Supply
2. " SET "Button: Press and hold for 3 seconds to power off. In the off state, press once to enter the setting mode. The display will blink and show the set value.
   " - "Button: In the setting mode, press once to decrease the temperature by 0.1°C. Press and hold to decrease the temperature value quickly.
   " + "Button: In the setting mode, press once to increase the temperature by 0.1°C. Press and hold to increase the temperature value quickly.
3. After reaching the set value for 3 seconds, the display will automatically show the current water temperature.
4. The temperature setting will be automatically saved.

Installation Instructions

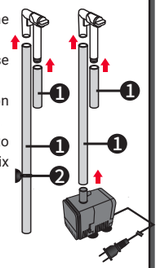
1 Placement

- Place the Nano E-Chiller beside the aquarium, close to aquarium glass.
- Ensure there is proper ventilation on both side of the Nano E-Chiller



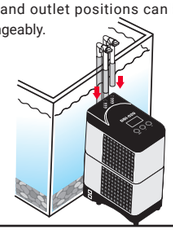
2 Preparing Hose & Powerhead

- Cut the (1)water hose to the desired length.
- Attach the F-type water hose connector.
- Place the powerhead flat on the bottom of the aquarium.
- Attach the (2)suction cup to the outlet (OUT) hose and fix it to the aquarium glass.



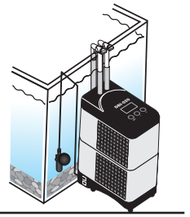
3 Connecting the Hoses

- Secure the F-type water hose connector to the upper edge of the aquarium.
- Connect the hoses to the cooling unit's IN and OUT connectors.
- The water inlet and outlet positions can be chosen interchangeably.



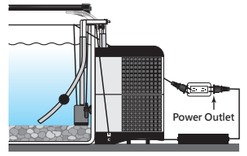
4 Temperature Sensor

- Attach the temperature sensor to a spot on the aquarium glass with good water circulation.



5 Power Connections

- Plug the cooling unit into the power outlet.
- Plug the powerhead into the power outlet.
- NOTE: Use DRIP LOOP method mentioned before plugging unit in to power outlet



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- SET button: Turns the unit on/off and adjusts the temperature setting.
- "–" button: Decreases the temperature.
- "+" button: Increases the temperature.

DBI-020

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