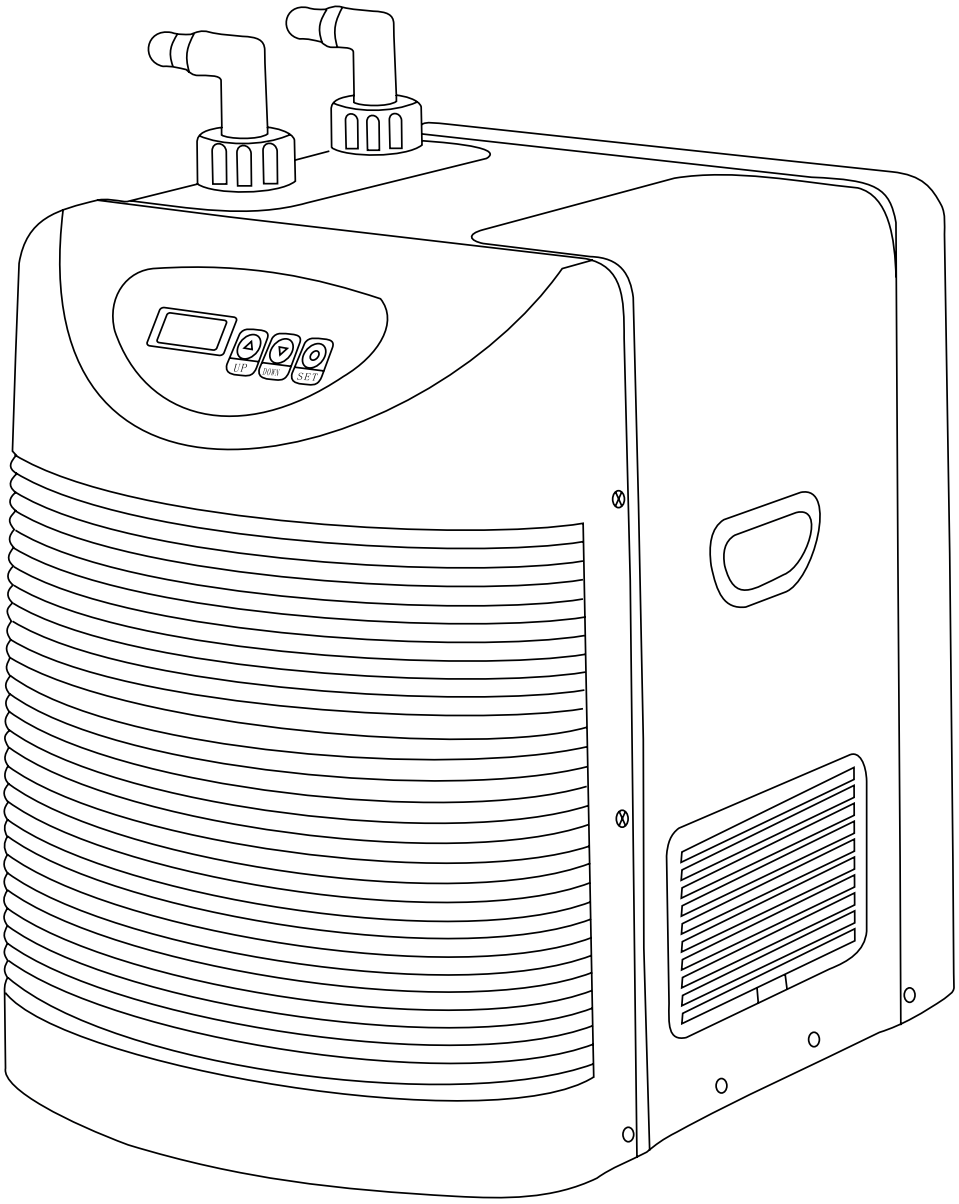
EN

USER MANUAL

ICE G2 AQUARIUM CHILLER

FOR MODELS 400, 600, 800, 1200, 2000, 3000

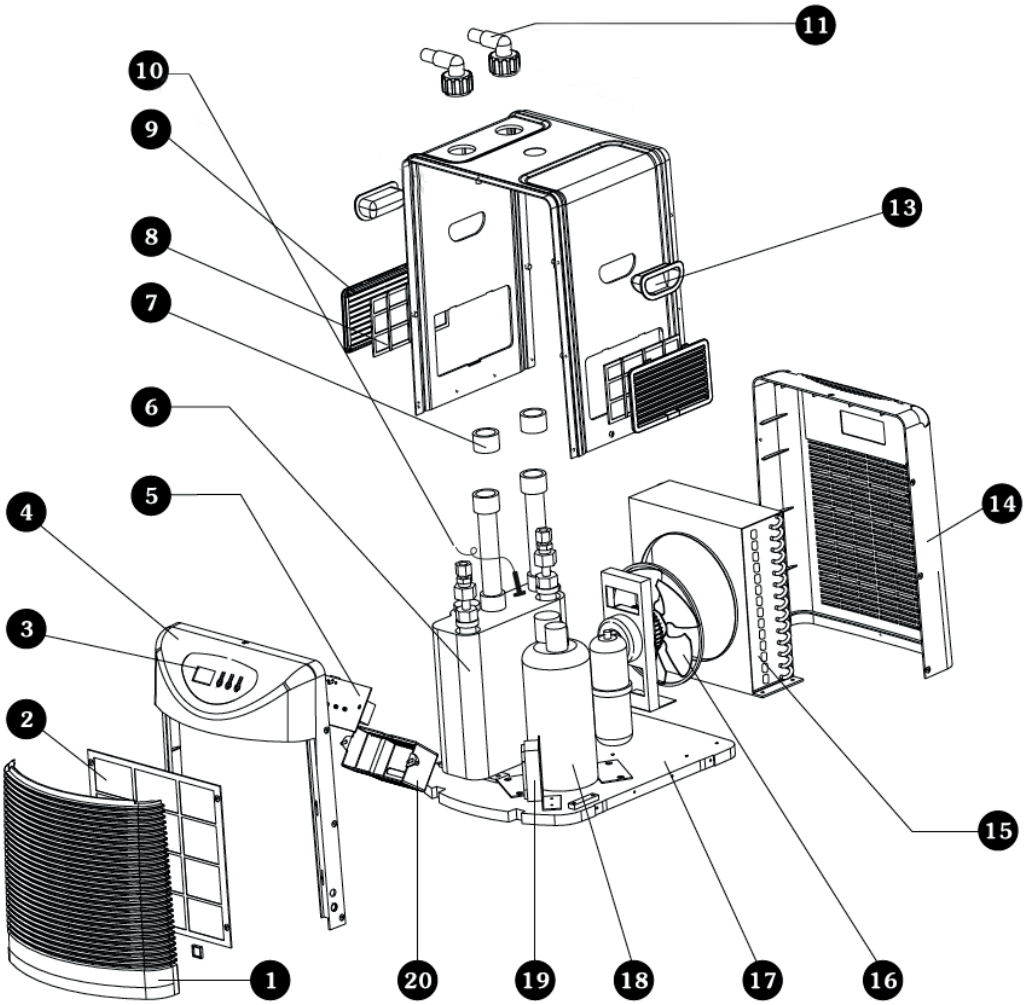


AQUAVIE®

Please read this manual carefully before use.

TABLE OF CONTENTS

PARTS LIST



N°	Parts	ICE400	ICE600	ICE800	ICE1200	ICE2000	ICE3000
1 + 2	Front filter cover + filter	AV30335	AV30342	AV30359	AV30366	AV30373	-
3	Control panel	AV30038	AV30045	AV30052	AV30069	AV30076	AV30083
4	Front cover	-	-	-	-	-	-
5	Motherboard	-	-	-	-	-	-
6	Evaporator	-	-	-	-	-	-
7	Joint sleeve	-	-	-	-	-	-
8	Side filter	-	-	-	-	-	-
9	Side filter cover	AV30151	AV30168		AV30182		AV30183
10	Temperature sensor	AV30212			AV30243	AV30250	AV30212
11	Inlet/outlet fittings	-	-	-	-	-	-
13	Handle	-	-	-	-	-	-
14	Rear cover	-	-	-	-	-	-
15	Capacitor	AV30274	AV30281	AV30298	AV30304	AV30311	AV30328
16	Fan	AV30090	AV30106	AV30113	AV30120	AV30137	AV30138
17	Base	-	-	-	-	-	-
18	Compressor	-	-	-	-	-	-
19	Junction box	-	-	-	-	-	-
20	Rear motherboard plate	-	-	-	-	-	-

INTRODUCTION

Thank you for choosing the ICE G2 aquarium chiller from Aquavie. This advanced and economical system helps maintain the ideal temperature for your aquarium.

High aquarium temperatures can now be quickly and easily regulated by selecting the appropriate chiller model from the ICE G2 range. Thanks to a high-quality pure titanium heat exchanger, these chillers are suitable for both freshwater and marine aquariums.

The system's optimized design and high-efficiency compressor reduce strain on the rotor, significantly minimizing noise levels. Additionally, the digital temperature controller ensures optimal stability of the selected temperature. Our chillers use an eco-friendly refrigerant, R513a.

Designed for durability, the ICE G2 chillers feature a sturdy chassis and an ABS casing that is both aesthetically pleasing and corrosion-resistant, allowing them to adapt to any environment.

Before use, we recommend reading this manual carefully to avoid any mishandling that could harm your fish or damage the device.

FEATURES

1. Microprocessor-controlled system for easy and precise use.
2. High cooling capacity, capable of lowering water temperature to 4°C in a short time.
3. Uses environmentally friendly refrigerant (R513a).
4. Corrosion-resistant titanium evaporator, suitable for both freshwater and marine aquariums.
5. Electrical overload protection system.
6. Automatic temperature memory in case of a power outage.

ADDITIONAL FEATURES (ICE G2 3000 only)

1. Built-in heating function (cannot heat and cool simultaneously).
2. Ultra-quiet compressor (Mitsubishi/Panasonic/Hitachi).
3. Cooling capacity down to 3°C.
4. Automatic defrost system and heating circuit.

SAFETY TIPS

This manual and the device use various symbols to ensure safe operation.
Here is their meaning:

Warning: Indicates a potential hazard that may cause injury or property damage.

Mandatory Action: Recommends a precautionary measure.

Prohibited Action: Indicates a dangerous action to avoid.

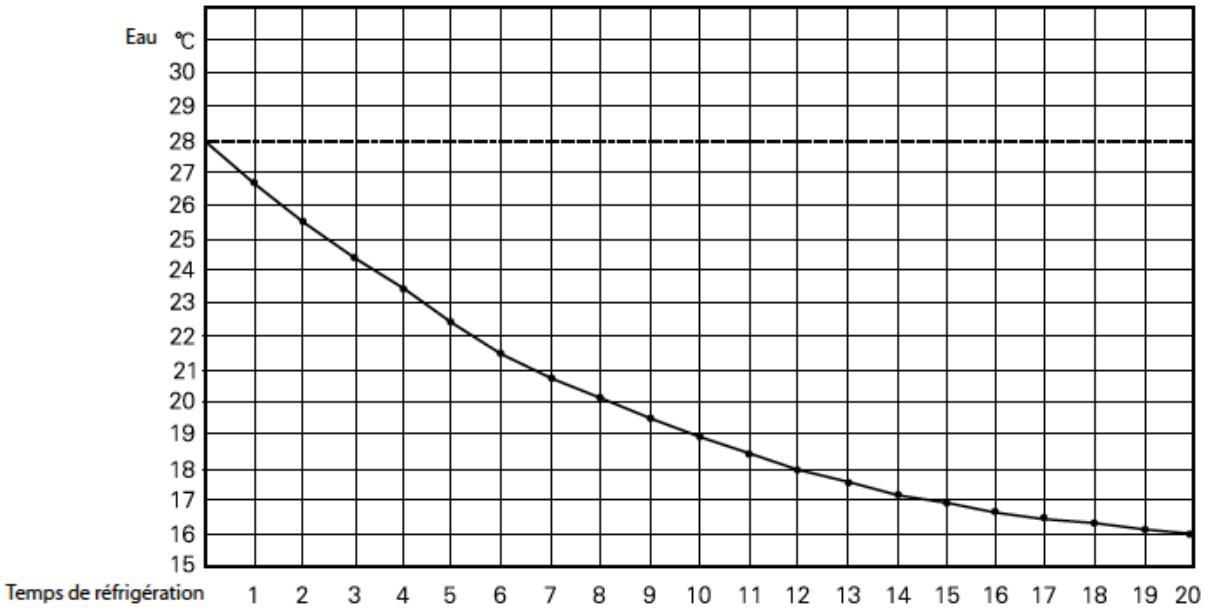
TECHNICAL SPECIFICATIONS

Model	ICE400	ICE600	ICE800	ICE1200	ICE2000	ICE3000
Voltage	220-240V	220-240V	220-240V	220-240V	220-240V	220-240V
Frequency	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz
Current	0.8 A	1.3 A	1.8 A	2.4 A	3.2 A	7 A
Power	1/15HP	1/6HP	1/4HP	1/2HP	1HP	2HP
Water Flow Rate	200-1000L/h	600-2200L/h	1000-2500L/h	1200-3000L/h	1500-4000L/h	3000-6000L/h
Refrigerant	R513A	R513A	R513A	R513A	R513A	R513A
Refrigerant Weight	130g	120g	160g	340g	620g	1650g
Weight	9.5Kg	18Kg	18.6Kg	22Kg	31.3Kg	47Kg
Dimensions (mm)	338x218x325	448x330x440	448x330x440	475x360x490	520x400x480	634x468x590
Supply Hose Diameter (not included)	12/16	16/22	16/22	19/27	25/35	30+
Cooling Examples by Water Volume						
Ambient Temperature	30°C	30°C	30°C	30°C	30°C	30°C
Water Temperature Before Cooling	28°C	28°C	28°C	28°C	28°C	28°C
Cooling Duration	20h	20h	20h	20h	20h	20h
Cooled Water Volume (Example A)	130L	250L	300L	500L	1000L	/
Water Temperature After Cooling	16°C	18°C	18°C	18°C	14°C-16°C	
Cooled Water Volume (Example B)	260L	300L	600L	1000L	2000L	2000L
Water Temperature After Cooling	22°C	22°C	23°C	23°C	21°C-22°C	16°C

1. The flow rate depends on the installed pump or external filter (pump and filter not included).
2. Cooling performance tests are conducted at an ambient temperature of 30°C, with no additional heat sources.
3. The cooling speed and efficiency are influenced by the installation location and surrounding heat sources, such as lighting or pumps.
4. Cooling efficiency decreases in cases of insufficient ventilation in the cabinet or room, as well as due to the heat generated by the device.

PERFORMANCE CURVES

AMBIENT TEMPERATURE: 30°C. INITIAL WATER TEMPERATURE: 28°C.
COOLED VOLUME (FOR TESTING): ICE400 - 150L, ICE600 et ICE800 - 300L, ICE1200 & ICE2000 - 1000L, ICE3000 - 2000L.



The cooling performance test is conducted at an ambient temperature of 30°C with no additional heat sources.

INSTALLATION

Upon unpacking, check the chiller model and ensure there is no damage from transport. You should also verify that all accessories and spare parts are included, as listed below.

1. CHECK PACKAGE CONTENTS:

ICE G2 Chiller × 1
QR User Manual × 1
Water inlet and outlet connectors × 2
Power cord for the EU × 1 (except ICE3000: terminal block installation required)

2. INSTALLATION LOCATION:

1. Do not install the chiller outdoors. (Illustration 1)

2. Choose a location that is as cool as possible and keep the device away from flammable materials, heat sources, direct sunlight, humidity, and dust. (Illustration 2)

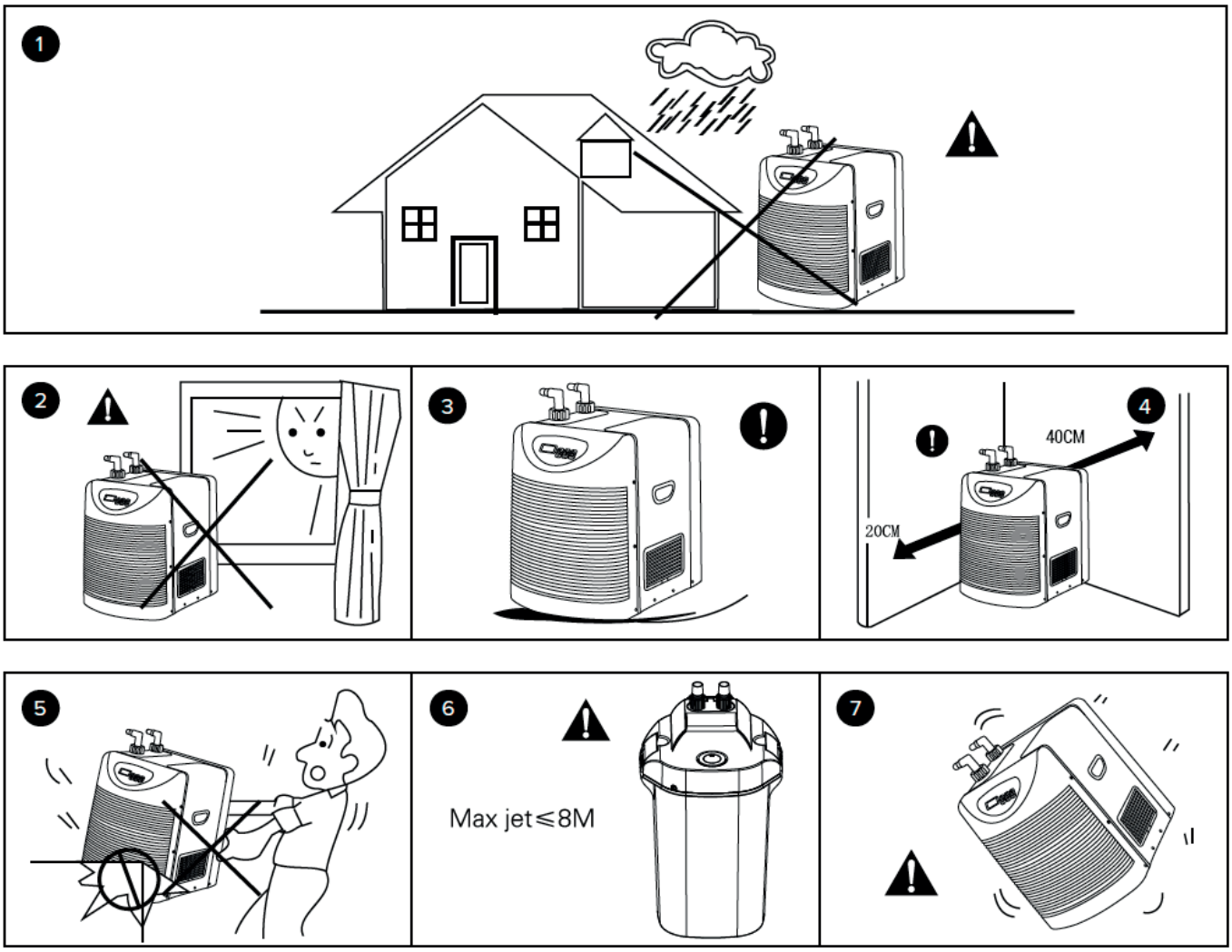
3. Place the device on a stable, horizontal surface. (Illustration 3)

4. Install the device at a distance of at least 20 to 40 cm from a wall or structure to ensure proper ventilation. (Illustration 4)

5. Do not cover the chiller when it is in operation. Avoid shaking or hitting it with other objects. (Illustration 5)

6. This chiller is not equipped with a built-in water pump; therefore, using an appropriate pump is necessary to circulate the water, as specified in the specification table. The pump's discharge pressure should not exceed 8 meters, and a pre-filter must be installed. Using equipment not conforming to the specifications may result in water leaks or other damages. (Illustration 6)

7. Never store or place the chiller upside down or on its side, as this could damage it. If the device has been tilted, position it correctly and wait at least 20 minutes before turning it on. (Illustration 7)



3. INSTALLATION SUGGESTIONS:

1. Electrical work should be carried out by a qualified electrician.
2. A dedicated power outlet should be used for the device.
3. Ensure that the power source complies with the requirements specified on the device's nameplate.
4. The power supply should be equipped with a circuit breaker and grounding.
5. Disconnect the device during installation.
6. The ICE G2 3000 model does not come with a plug, and a professional must handle its wiring with a suitable contactor.

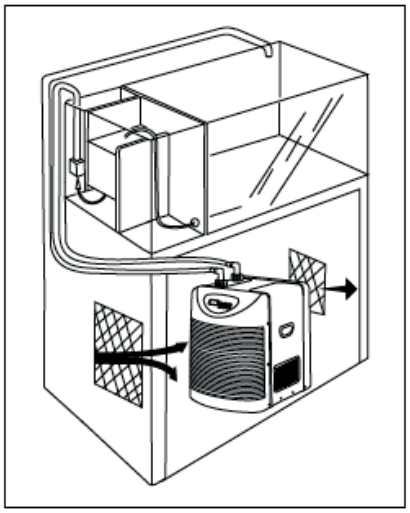
4. INSTALLATION METHODS:

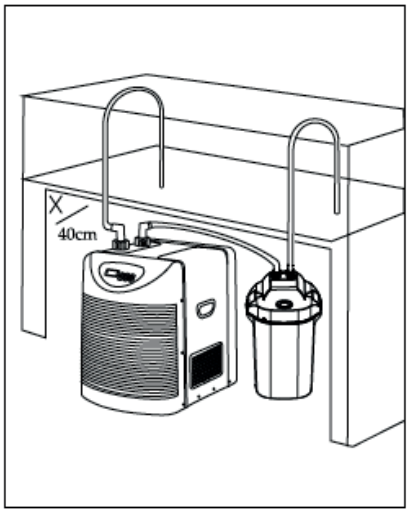
Note: The chiller must be used with a recirculation and water supply system equipped with a filter.

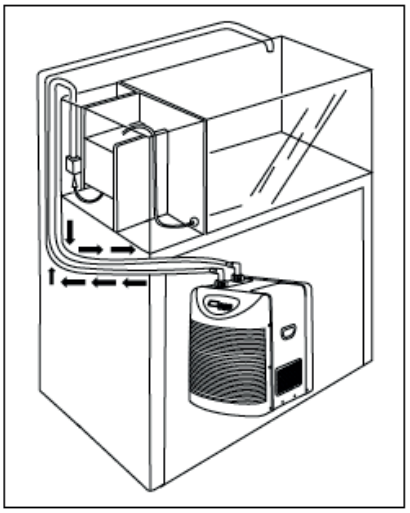
The chiller can also be installed in a hidden location, such as inside a closed cabinet. However, if the cabinet lacks ventilation or vents, it is crucial to create proper openings, ensuring a minimum opening area of 450 cm^2 for adequate air circulation. When installing vents, ensure that the air intake openings are aligned with those of the chiller and position the air exhaust vent as high as possible to effectively expel warm air.

The chiller should be installed with its rear part as close as possible to the cabinet's vent, allowing better circulation of fresh air. For optimal ventilation, it is recommended to install the chiller outside the aquarium cabinet.

If the chiller is placed beneath an aquarium equipped with a filter, the discharge (filtered water) can be directly connected to the chiller's inlet. When using with seawater, it is essential to filter the water before it enters the chiller. Otherwise, impurities could block the coil, compromising the chiller's efficiency.







5. BEFORE USING THE CHILLER, CHECK THE FOLLOWING:

1. Ensure that the water level in the aquarium is sufficient to guarantee continuous water supply.
2. Check for any water leaks at the connections of the hoses and pipes.
3. Fully insert the plug into the wall outlet and ensure it is securely connected.
4. Carefully inspect the circulation and filtration system, particularly to check for any risk of blockage in the circulation pipe.

OPERATION

Note: Before using the chiller, you must start the pump to ensure the proper functioning of the water circulation/filtration system. The control panel consists of three buttons to modify or set the temperature (4 buttons on the ICE G2 3000 model).

DISPLAYING AQUARIUM TEMPERATURE AND TARGET TEMPERATURE
When in use, the chiller's display shows the current water temperature. Press the SET button once to display the target temperature for the device; a dot (1) on the screen will blink to indicate the target temperature. Press the SET button again or wait 8 seconds for the screen to return to displaying the aquarium temperature.

SETTING THE TARGET TEMPERATURE
Press the SET button for three seconds to enter programming mode; a beep will sound, and the target temperature will blink on the screen. Press the △ button to increase the temperature or the ▽ button to decrease the temperature based on the required new settings. A beep will sound each time you press a button in programming mode. Press the SET button again to save the settings or wait for eight seconds. The screen will return to showing the aquarium temperature when the chiller is in operation. The available temperature range is between 4°C and 28°C.

ICE G2 3000 ONLY - SETTING THE TARGET TEMPERATURE
The control panel of this model includes 4 buttons to control the chiller and an additional heating cycle.

To set the chiller's temperature, press COLD for 3 seconds, then follow the target temperature setting instructions above. You can set the temperature between 3°C and 46°C.

To set the heating temperature, press HEAT for 3 seconds, then follow the target temperature setting instructions above. Use the TPS arrows to access modes. «TPS» will appear on the screen to indicate the activation of the heating temperature. You can set the heating temperature between 3°C and 46°C.

«DST» will appear on the screen to indicate the defrost start temperature.

«DFT» will appear on the screen to indicate the defrost stop temperature.

Confirm the required mode by pressing HEAT again, and the current set value will appear on the screen. Press the △ ▽ arrows to select the desired value, then press HEAT again to confirm, or wait for 8 seconds.

MODIFYING THE DEFROST START AND STOP TEMPERATURES

The heating circuit of this chiller offers a defrosting function to maintain heating efficiency. It is not used in cooling mode.

To modify the DEFROST START temperature (default -3°C), select the DST function in the menu above, and press HEAT again to activate the adjustment mode. Use the △ ▽ arrows to choose the defrost start temperature (from -15°C to +3°C).

To modify the DEFROST STOP temperature (default +5°C), select the DFT function in the menu above, and press HEAT again to activate the adjustment mode. Use the △ ▽ arrows to choose the defrost stop temperature (from -12°C to +15°C).

SETTING THE MARGIN

On the ICE G2 3000 model, it is possible to adjust the margin value between the operating temperature and the stop temperature, between 1°C and 3°C. At 1°C, the chiller turns on and off more frequently but maintains a narrower temperature range.

Press the ▽ button for 3 seconds until the numbers start flashing, then press the △ ▽ buttons to adjust the value.

CALIBRATION OF TEMPERATURE

It is possible to calibrate the chiller's temperature to match another device, such as a high-precision thermometer, a temperature controller, or an aquarium computer, or to create an offset to adjust the aquarium water temperature if the chiller is installed at a distance.

Press and hold both △ and ▽ simultaneously for 6 seconds. You can then adjust the value up or down by 1.5 degrees in increments of 0.1 degree.

If this function is not specifically needed, it is recommended to keep the factory setting.

COLD UNIT PROTECTION SYSTEM

A protection system is integrated into the cold unit to prevent the compressor from starting for three minutes between cooling cycles during normal operation, after a reset, or during initial startup.

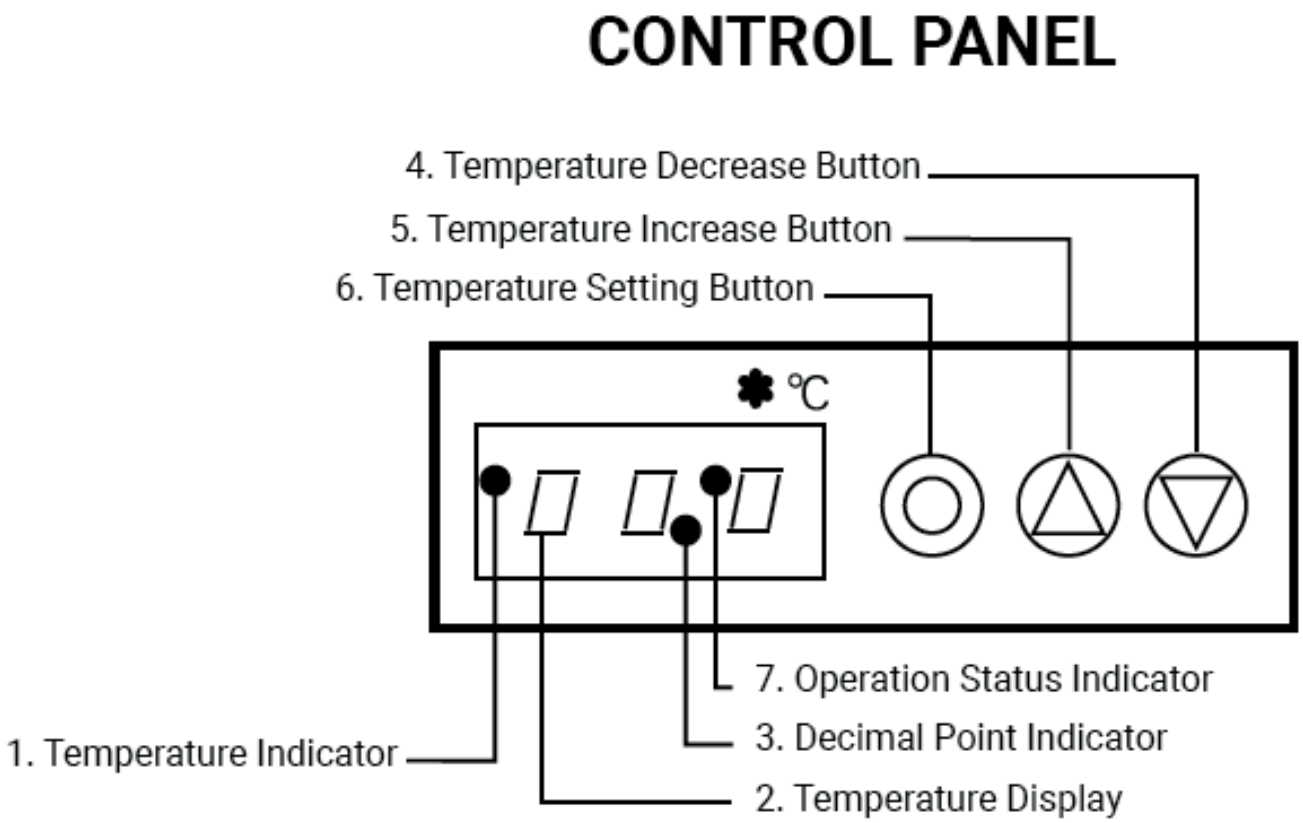
When using an external third-party temperature controller, the cold unit interprets this as a reset and waits three minutes before starting the compresso

AUTOMATIC START AND STOP OF THE COLD UNIT COMPRESSOR
If the cold unit compressor has not been used for more than three minutes and the water temperature rises 1 °C above the set temperature, the compressor automatically restarts.

The compressor continues to operate and cool the water, then automatically stops when the aquarium temperature reaches or falls below the set temperature.

Indicator light (7) shows that the cold unit is running. The light turns off when the aquarium temperature reaches the set value and the compressor stops; it blinks to indicate that the protection system is preventing the compressor from restarting for three minutes.

ERROR DISPLAY SYSTEM
Certain faults are automatically displayed on the screen. When the water temperature sensor is damaged, the code P1 (on ICE G2 3000 model) appears on the display, and the protection system shuts down the cold unit.
The ICE G2 3000 model also alerts the user if the defrost circuit is not functioning properly.



CLEANING AND MAINTENANCE

1. It is recommended to clean the circulation and filtration system every month to ensure optimal efficiency. Always make sure to unplug the cord before proceeding with the cleaning. Rinse the impurities accumulated in the filter, the inlet and outlet pipes, the flow diverter, the pump, and the chamber lid with lukewarm water. The use of soap or detergents is not recommended for cleaning the circulation filter, as these products may harm the health of the fish. (Illustration 1)

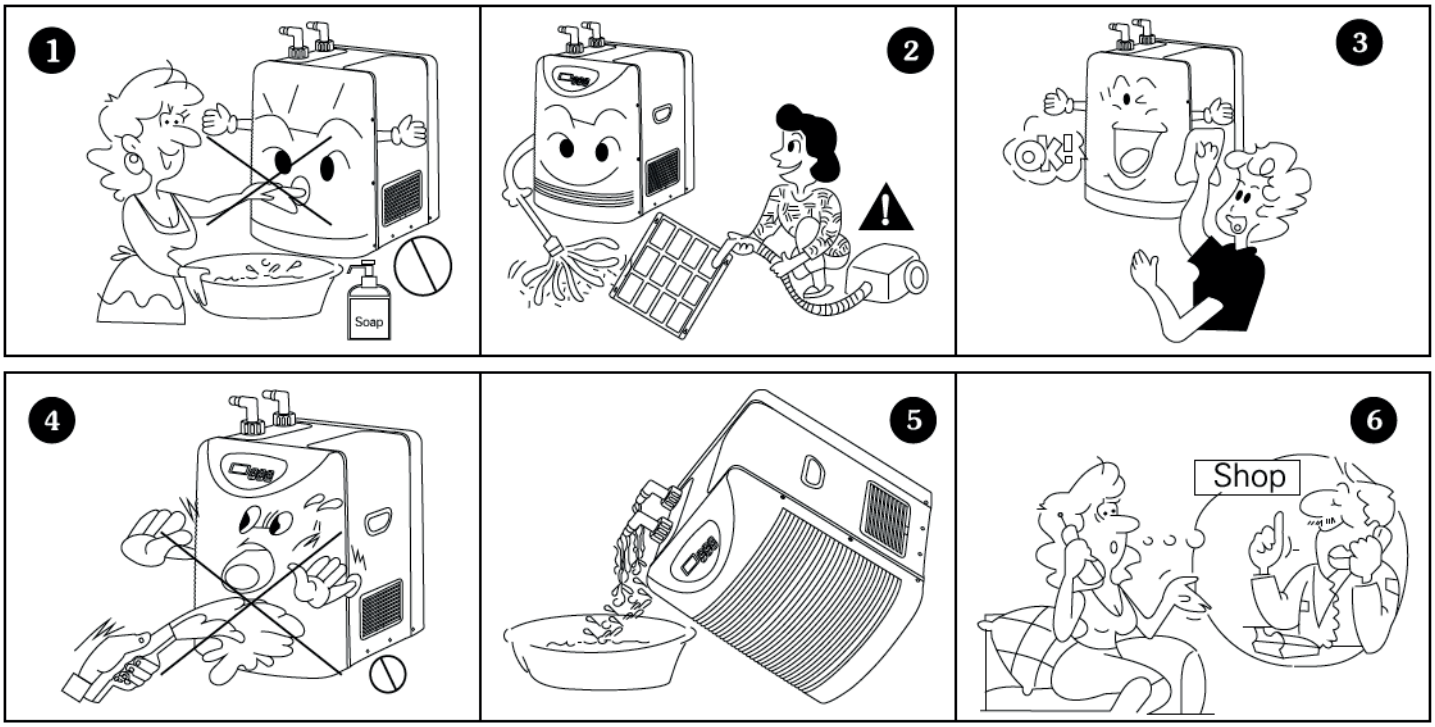
2. Remove dust from the air inlet and outlet using a brush or vacuum cleaner. To avoid electric shock, do not insert any cables or tools into the air openings while the device is in operation. (Illustration 2)

3. Clean the socket, power switch, and temperature control device with a soft, dry cloth. (Illustration 3)

4. NEVER submerge the device in water or rinse it directly to prevent damage to the electrical insulation of the cooling unit. (Illustration 4)

5. If the device will not be used for an extended period, unplug it. Remove the inlet and outlet pipes, then tilt the front of the cooling unit to drain any residual water. Clean all parts with a soft cloth, cover the device with a plastic bag, and store it upright in a safe, dry location. (Illustration 5)

6. If you have any questions, contact your dealer. (Illustration 6)



FILTER CLEANING STEPS (FRONT AND SIDE FILTERS)

1. Loosen the screw located at the front of the intake cover and turn counterclockwise (Illustration 1).

2. Gently pull the intake cover forward (Illustration 2).

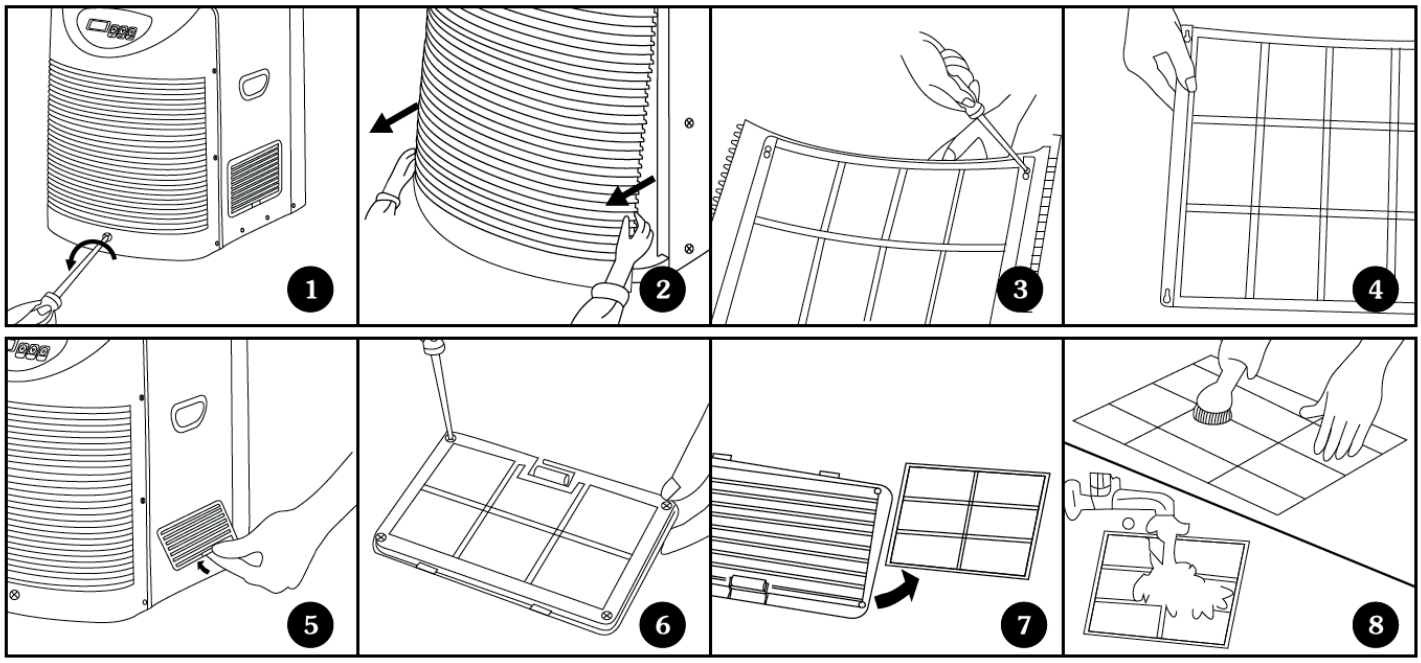
3. Loosen the screws on the filter and remove it (Illustrations 3 and 4).

4. Lift and remove the side covers of the filter (Illustration 5).

5. Loosen the screws on the side draft breaker and remove the filter (Illustrations 6 and 7).

6. Remove the dust using a brush or vacuum cleaner, or rinse the filter thoroughly with water and dry it completely before reinstalling it (Illustration 8).

7. Reinstall in reverse order.



TROUBLESHOOTING GUIDE

Before contacting customer service, please refer to the table below for possible causes of the issues you are experiencing.

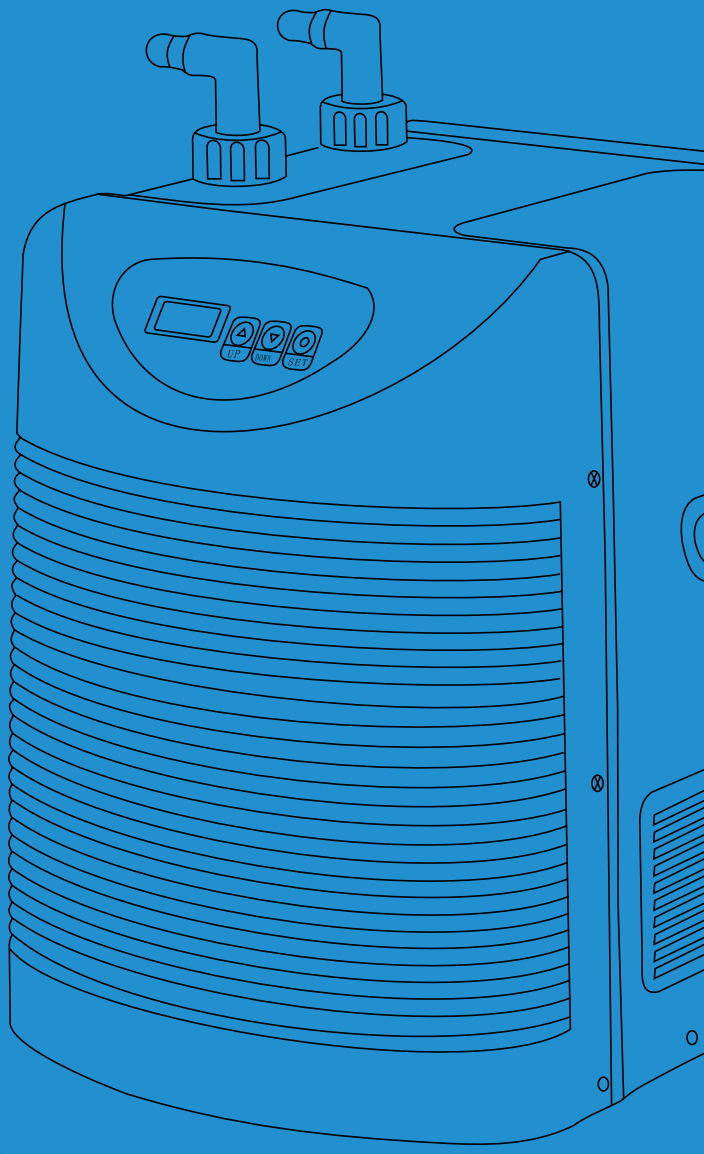
PHENOMENON	CAUSE	SOLUTION
The cooler and screen are not working	The device is not powered on The plug is loose The fuse has blown	Power on the device Make sure the power cord is properly connected Change the fuse
The plug is loose	Incorrect power voltage or frequency	Connect the device to the correct power source, according to the rating plate
The cooling power is lower or there is no cooling	The protection system of the aquarium chiller is functioning normally The set temperature is higher than the aquarium temperature The air intake and exhaust are blocked by dirt Refrigerant loss The water flow rate is too high	Wait 3 minutes and the aquarium chiller will restart automatically Adjust the temperature of the aquarium chiller Clean the dust from the air intake and exhaust using a brush or vacuum cleaner Refill the aquarium chiller with the correct refrigerant. This should be done by a qualified engineer Reduce the water flow rate
Noisy operation or presence of vibrations	The base is not flat or unstable	Place the device on a flat and stable base

WARRANTY

1. We guarantee this product against any material or manufacturing defects.

2. If the product is damaged during normal use, it may be repaired free of charge.
Any warranty repair will only be carried out upon presentation of proof of purchase, provided the request is made within the warranty period.

3. The warranty does not apply in cases of accidental damage, misuse, negligence, or modifications and repairs carried out by unauthorized personnel.



AQUAVIE®

Aquavie
150 rue Amélia Earhart
34430
Saint-Jean-de-Védas
France

www.aquavie.fr

FR

Ne pas jeter sur la voie publique.