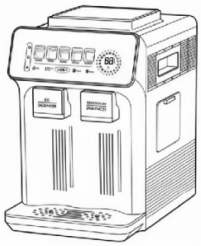
ICEWAVE COMMERCIAL COLLECTION

3-IN-1 ICE MAKER

USER MANUAL

Model | ZSW-ZB21



ZSW-ZB21

ICE CUBES

SLUSH

ICE WATER

Read before first use.

ICEWAVE

WELCOME

A clearer way to serve ice

This edition is dedicated to the ZSW-ZB21 3-in-1 ice maker and uses only its controls, operation and parameters.

MODEL LOCK

Model: ZSW-ZB21. Use the ZB21 control panel, operating steps, technical parameters and electrical schematic in this manual.

IN THIS MANUAL

01	Safety essentials
02	Machine structure
03	Controls and indicators
04	First use and water supply
05	Operation steps 1-4
06	Operation steps 5-6
07	Schedule, timing and status
08	Maintenance and special design
09	Troubleshooting
10	Warranty and service record

MODEL SNAPSHOT

Model	Climate	Power	Water capacity
ZSW-ZB21	SN / N / ST	120 W	1.5 L

01 / SAFETY

Safety essentials

Read before connecting water or power.

WARNING

Disconnect power before maintenance. Do not touch hot compressor or condenser surfaces, the evaporator during ice making, or any moving part.

Standards reference: GB/T 4706.1-2024 / IEC 60335-1:2016 and GB/T 4706.13-2024 / IEC 60335-2-24:2020.

1. Disconnect the power supply before maintenance.
2. Do not pull the power cord directly when plugging in or unplugging the device.
3. If the ice cubes are abnormal, contact the seller or after-sales service.
4. The compressor and condenser surfaces may reach 70-90 C during operation. The surrounding area may be hot; do not touch them.
5. Rapid freezing may make the ice look foggy. This is air trapped in the water and does not affect ice quality or taste.
6. When the machine is not in use, open the drawer at least 2 cm to allow air circulation and help prevent metal parts from rusting.
7. If the power cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person.
8. This appliance may be used by children aged 8 years and over and by persons with reduced physical, sensory or mental capabilities or limited experience only when supervised or instructed about safe use and the risks involved.
9. Children must not play with the appliance. Children must not clean or perform user maintenance without supervision.

01 / SAFETY

Water, ventilation and handling

The ZSW-ZB21 uses potable water and needs clear ventilation.

10. Use only bottled water or high-quality tap water. Do not use juice or other beverages as the water supply.
11. Keep the ventilation openings on the sides of the machine clear at all times.
12. Do not use mechanical devices or other methods to accelerate defrosting, except those recommended by the manufacturer.
13. Do not damage the refrigerant circuit.
14. Do not use electrical appliances in the food storage compartment unless they are of a type recommended by the manufacturer.
15. Do not store explosives, such as flammable sprays, in the appliance.
16. Only potable water may be filled into the machine.
17. This appliance is intended for household and similar uses, including kitchen areas in shops, offices and other work environments; farms; hotels, motels and bed-and-breakfast environments; and catering or similar non-retail uses.

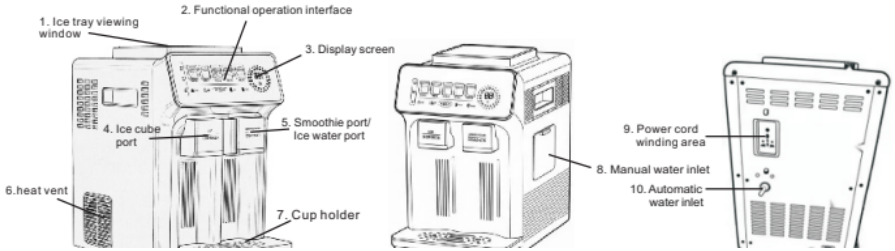
IMPORTANT SAFETY TIPS

- Do not touch the evaporator while the ice maker is in use or making ice. This may cause frostbite.
- Do not use or operate the machine if the power cord is damaged.
- Use the correct power outlet and make sure the plug is fully inserted.
- Keep the power cord away from carpets, insulating objects, walkways and water. Do not cover it or immerse it in water.
- Extension cords are not recommended because they may cause overheating or fire. If one must be used, use a cord with a wire gauge of at least 1.5 mm2.
- Disconnect power before cleaning or maintenance. When children are nearby, use the machine only under adult supervision.
- Do not use flammable liquids to clean the ice maker because they may cause fire or explosion.
- Do not invert the ice maker. If it is inverted, place it upright for 2 hours before turning it on. If moved from outdoors to indoors in winter, wait several hours for it to reach room temperature before powering on.

02 / STRUCTURE

Know the ZSW-ZB21

The following numbered view and part names apply to ZSW-ZB21.



PARTS AND PURPOSE

No.	Part
1	Ice tray viewing window
2	Functional operation interface
3	Display screen
4	Ice cube port
5	Smoothie port / ice water port
6	Heat vent
7	Cup holder
8	Manual water inlet
9	Power cord winding area
10	Automatic water inlet
11	Power cord

CHECK BEFORE USE

Keep the heat vents clear. Keep the viewing window closed during ice making and place the cup directly under the correct outlet before dispensing.

03 / CONTROLS

One interface, three outputs

The ZSW-ZB21 combines ice cubes, slush and ice water dispensing.



CONTROL FUNCTIONS

Control	Function
Power	Long press 3 seconds for standby; long press again 3 seconds to power off.
Ice cube	Dispense ice cubes. Press again to stop.
Slush	Dispense slush. Press again to stop.
Ice water	Dispense ice water. Press again to stop.
Ice thickness	In ice-making mode, cycle through Honey, Milk, Cola, Coffee and Liquor.
Schedule	Set scheduled power-on in standby or scheduled power-off during ice making.

MODE ORDER

The five ice-making modes are Honey, Milk, Cola, Coffee and Liquor. Their ice-making times increase sequentially, changing ice thickness.

03 / CONTROLS

Read the display before acting

Status indicators tell you when to refill, clear an ice jam or wait for release.

Display	Meaning and action
Fault	Ice jam or fault condition. Unplug, check for an ice jam and retry. If the fault remains, contact service.
Ice Full	Remove objects blocking the infrared receiver/transmitter. The machine should restart; restart it if needed.
Low Water	Refill the tank or check the rear water source and float switch.
00	Flashing indicates the defrosting / ice-release state.
H / M / C	H means hours, M means minutes and C means Celsius.

FUNCTION COMPATIBILITY

- Ice cubes and slush cannot be used simultaneously.
- Slush and ice water cannot be used simultaneously.
- The ice cube mode selected during ice making is executed from the next ice-making cycle.
- When ice is stored for a long time, it may freeze together. Separate it with a spoon before dispensing.

DISPLAY UNITS

During pre-cooling, the display shows water temperature with C. During ice making, it shows the countdown with M. Scheduled programs show H.

04 / FIRST USE

Prepare the machine correctly

Complete these checks before the first ice-making cycle.

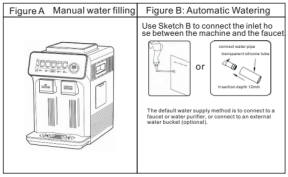
1. During transportation, keep the cabinet tilt angle at or below 45 degrees. Do not invert the machine.
2. Remove all packaging and inspect the ice maker, power cord and plug for damage.
3. Place the machine level on a flat surface. Leave 150 mm of space above, behind and on both sides. Keep it away from ovens, radiators and other heat sources.
4. Before first use, wait 2 hours after placing the machine and keep the front cover open for at least 2 hours.
5. Make sure the voltage shown on the ice maker matches the voltage in your home.
6. Do not use pure water. Mineral water is recommended; only potable water may be filled.
7. Keep the observation window closed during ice making.

ACCESSORIES

No.	Name	Qty.
1	Main unit	1
2	Cup holder	1
3	Power cord	1
4	Water inlet hose	1

WATER SUPPLY

The default water supply may be a faucet or water purifier, or an optional external water bucket. Do not use juice or other beverages in the water tank.



05 / OPERATION

Start the ZSW-ZB21

Steps 1-4: power, water supply, standby and pre-cooling.

LOW WATER

If the low-water indicator turns on while making ice, add an appropriate amount of water to the tank and remove ice cubes to prevent overflow when the ice melts.

1. Plug in the power. All lights illuminate for 1 second; the power-button indicator flashes and the other indicators turn off.
2. Add water using the manual filling method or the automatic water inlet. Follow the water-supply diagram on the previous page.
3. Press and hold the power button for 3 seconds to enter standby mode.
4. In standby mode, briefly press the power button to start ice making. If water temperature is above 20 C, the machine performs circulation-flip pre-cooling. Ice making begins below 17 C. Press the power button briefly again to stop and return to standby.

PRE-COOLING

The display shows C during pre-cooling. During ice making, it shows the countdown with M.

06 / OPERATION

Choose thickness and dispense

Steps 5-6: ice thickness modes and the three dispensing outputs.

STEP 5 / ICE THICKNESS

Press the Ice Cube Mode key. The menu icon flashes. Press the key to cycle through Honey, Milk, Cola, Coffee and Liquor. The five modes use different ice-making times and therefore produce different ice thicknesses. If a mode is selected while ice making is in progress, it takes effect from the next cycle.



STEP 6 / DISPENSE

- Ice cubes: after ice is produced, press the Ice Cube key. The ice-trough turntable rotates automatically and ice drops from the ice outlet. Press again to stop.
- Slush: press the Slush key. The turntable rotates automatically and slush dispenses from the slush and ice-water outlet. Press again to stop.
- Ice water: press the Ice Water key to dispense from the slush and ice-water outlet. Press again to stop.
- Place the cup directly below the correct outlet. Ice cubes and slush cannot be used simultaneously; slush and ice water cannot be used simultaneously.

DISPENSING NOTE

If ice is stored in the machine for a long time, it may freeze together and become difficult to dispense. Separate the ice with a spoon before pressing the dispensing key.

07 / OPERATION

Schedule, timing and status

Steps 7-11: scheduled programs, cycle behavior, status and power off.

7. Scheduled power-on: in standby, briefly press the Schedule key. The default is 1 hour; each brief press adds 1 hour up to a maximum of 12 hours. Press and hold to exit.
8. Scheduled power-off: during ice making, briefly press the Schedule key. The default is 1 hour; each brief press adds 1 hour up to a maximum of 12 hours. Press and hold to exit. The display shows H.
9. Each ice-making cycle takes approximately 6-8 minutes depending on ambient and water temperature. The first cycle may take longer, but a cycle generally does not exceed 15 minutes. After each cycle, ice release begins and the display flashes 00. The tank is refilled to the standard water level and the next cycle begins.
10. If the water cannot be refilled and the low-water icon remains on, the machine stops. After the water is restored to the standard level, operation resumes automatically. When the Ice Full light turns on, the machine stops and resumes after ice is removed. If the fault light turns on, E1 and E2 indicate ambient-temperature-sensor and water-temperature-sensor faults respectively.
11. Long press the power key to power off.

SERVICE ACTION

For an ice jam, unplug the machine, check for the jam and try again. If the fault remains, stop using the machine and contact customer service.

08 / MAINTENANCE

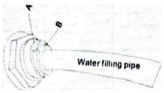
Keep the water path clean

Regular cleaning protects ice quality, the water system and the refrigeration system.

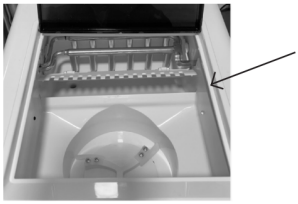
- Clean the interior, water tray, water tank, evaporator and other components regularly.
- Use a diluted water-and-vinegar solution to clean inner and outer surfaces. Do not spray chemicals or solvents such as acids, gasoline or oil. Rinse thoroughly before starting.
- Keep vents in the housing or internal structure unobstructed. Do not use mechanical devices to accelerate defrosting except as recommended by the manufacturer.
- Always use fresh water before making ice after initial installation or a long shutdown.

REMOVE THE INLET HOSE

Remove the blue clip A first, then press the outer white ring B. The water inlet hose can then be removed.



SPECIAL DESIGN



A sealing silicone strip around the ice window helps prevent hot air from entering and slows the melting of the ice block. Keep the viewing window closed during operation.

09 / TROUBLESHOOTING

Troubleshooting: water, power and ice size

If the suggested handling does not solve the issue, contact customer service.

Question	Possible cause	Suggested handling
Compressor is malfunctioning and buzzing	Low voltage	Power off and wait for the voltage to stabilize before restarting.
Compressor is malfunctioning and buzzing	Compressor damage	Power off, let the machine sit for 24 hours, then restart.
Low water indicator	Water tank low on water	Add water to the maximum water-level line and restart.
Low water indicator	Air in the water pump	Open the drain plug to let a small amount of water flow out, close the plug and restart.
Low water indicator	Water pump jammed or damaged	Clean the water pump or replace it if damaged.
Display indicator is not lit	Blown fuse / no power	Replace the fuse or restore power.
Ice cubes are too large to connect	Wrong ice cube size	Choose Small Ice when the ambient temperature is low.
Ice cubes are too large to connect	Ice block from the previous round	Shut down, wait for the ice cubes to fall off, remove them and restart.
Ice cubes are too large to connect	Evaporator too low	Lift the evaporator upwards.

STOP AND UNPLUG

Disconnect power before opening the machine, clearing an ice jam or inspecting the water path. Refrigeration and electrical service must be performed by qualified personnel.

09 / TROUBLESHOOTING

Troubleshooting: dispensing and refrigeration

If the suggested handling does not solve the issue, contact customer service.

Question	Possible cause	Suggested handling
Ice making is complete, but cubes are not pushed into the storage bin	Damaged ice scraper plate	Replace the ice scraper plate.
Ice making is complete, but cubes are not pushed into the storage bin	Water box stuck and cannot be flipped	Clear ice cubes from under the water tray and restart.
Fault indicator is on	Motor jamming	In standby mode, manually flip the water box several times, then restart.
Fault indicator is on	Viewing window is open	Keep the viewing window closed during operation.
Water temperature rises while working	Solenoid valve jammed	Unplug the power cord, wait one hour, then plug it back in and power on.
Water temperature rises while working	Solenoid valve damaged	Contact customer service.
Ice cubes will not fall from the evaporator	Solenoid valve or circuit board damaged	Contact customer service.
Ice-making process is normal but no ice cubes are produced	Compressor refrigerant leak	Contact customer service.

STOP AND UNPLUG

Disconnect power before opening the machine, clearing an ice jam or inspecting the water path. Refrigeration and electrical service must be performed by qualified personnel.

10 / TECHNICAL

Technical parameters

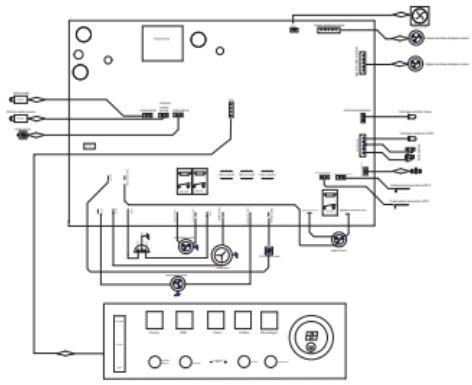
ZSW-ZB21 values only. Confirm the product nameplate before service.

Parameter	ZSW-ZB21 value
Model	ZSW-ZB21
Climate class	SN / N / ST
Safety class	I
Power supply	AC 220-240 V, 50/60 Hz or AC 110-120 V, 60 Hz
Rated current / power	0.84 A / 120 W
Maximum water filling capacity	1.5 L
Refrigerant / charge	R290 / 22 g
Net weight	12.4 kg
Gross weight	14.8 kg
Casing	ABS

SERVICE REFERENCE

The electrical schematic below is for qualified service personnel only. Disconnect power before inspection and do not open the machine unless qualified.

ELECTRICAL SCHEMATIC



ZSW-ZB21

11 / WARRANTY

Keep your product record

Complete the model and product ID from the nameplate before service.

Product model	ZSW-ZB21
Product ID	
Purchase date	
Customer name	
Contact number	
Address	

WARRANTY INFORMATION

- One-year free warranty on the entire unit.
- Three-year free warranty on major components, including the compressor.
- Paid repair applies to damage caused by improper use, maintenance or storage; unauthorized disassembly; missing warranty certificate and valid invoice; mismatch or modification of the product and warranty documents; force majeure; or an expired warranty period.

SERVICE RECORD

No.	Warranty item	Replaced part	Qty.	Repair fee	Technician / date