

Operating instructions

Commercial Ice Makers

Read the operating instruction before switching on for the first time

Page 14

EN

ggmgastro



EWBH160

EWBH230

ICE MAKERS

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Please read all instruction prior before using this machine. Improper installation, use, maintenance and service to the appliance may result in damage, injury or accident or death, the manufacture will invalidate the manufacturer' s warranty and product liability.

A) Proper installation, use and maintenance of this ice maker are important to get the best possible benefit and avoid a considerable risk from the product.

B) Make sure only manufacturer or qualified service agent or trained technicians should install, maintenance and service of this ice maker according with the manufacturer's instructions and following local codes and regulations.

C) Do not operate the ice maker that has been misused, abused, neglected, damaged or altered/modified from that of original manufactured specifications.

D) The ice maker should not be used by people with limited physical, sensory or mental capacity or those without the necessary experience and/or knowledge, unless such people are supervised by a person who is responsible for their safety.

E) Do not allow children play with the ice maker or its packaging materials.

F) To prevent injury or damage, the ice maker should have two people to lift, move and installed or its recommended that a lifting device is used.

G) Do not use the power supply cord, water supply line or drain line are damaged.

H) Do not use with water that is micro-biologically unsafe or unknown quality.

I) Do not store highly flammable or combustible material near the ice maker.

J) Keep away from heat, and location near the potable water source and drainage.

K) The ice maker must be used indoor only and specifically for making ice. any other use is not intended and is therefore considered improper and dangerous and will constitute misuse resulting in loss of warranty coverage.

L) Make sure there is an adequate ventilation around the ice maker.

M) Do not tilt the ice maker over on angle of 45' (also during transport) to prevent compressor damage.

N) Do not plug, unplug or touch the appliance with damp hands.

O) Always keep your working area clean, tidy and dry.

P) Please keep these manual in a safe accessible location for any further reference that maybe necessary.

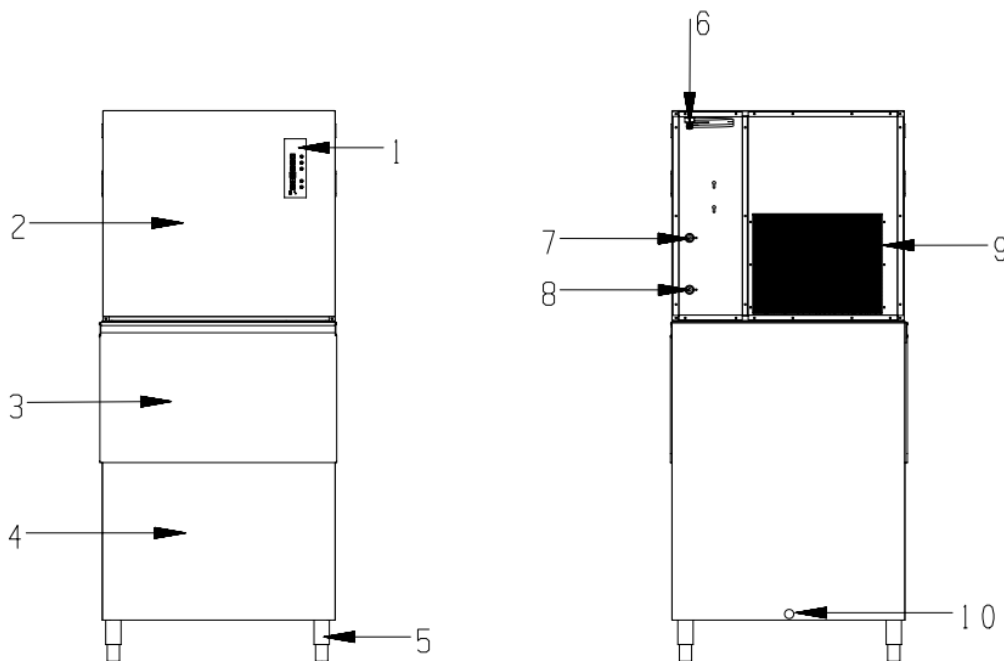
Rating specification of EWBH160、EWBH230 compact ice makers:

Model	EWBH160	EWBH230
Ice production	160kg	230kg
Storage	90kg	180kg
Voltage	220-240V 50Hz	220-240V 50Hz
Input power	800W	950W
Climate class	4	4
Refrigeration	R290,140g	R290,150g
Ambient temp	15-38°C	15-38°C
Water supply temp	10-32°C	10-32°C
Water supply pressure	0.13-0.55Mpa	0.13-0.55Mpa

Note: The rating condition is test at 21°C ambient temp and 15°C temp
 You will also to see the rating information on the upper right of the rear panel of he machine.

* We reserve the right to make technical changes in the interest of progress without prior notice.

Main view of the unit:



1. Display panel
2. Ice machine
3. Storage box door
4. Storage box
5. Adjustable feet
6. Power line
7. Ice machine water inlet
8. Ice machine drain
9. Condenser
10. Storage tank drain

Important: The installation of this machine must be carried out by qualified service technicians and accordance with the manufacturer's instructions and following local code and regulations.

Unpacking

Make sure that the ice maker is in good condition. In case of any double, do not use the machine, and inform both courier and your distributor.

Unpack the cardboard box and remove all packing material such as wrapping, bag, film tape etc. Make sure they are disposed of safely and must not be left within reach of children.

Remove the tape that is holding the door and separator. If any are left in ice maker, it will not work properly.

Location

For proper operation of the ice maker, the following location installation guideline must be followed:

This ice maker is not intended for outdoor use, do not install the ice maker where the ambient temperature will drop below 15°C or rise above 38°C, and the water temperature is drop below 10°C or rise above 32°C. The normal operation water pressure should be keep within 0.13-0.55Mpa.(Failure to do so may result in loss of production capacity, premature part failures and may void all warranties.

The location must not be near heat-generating equipment or where it may

exposed to direct sunlight, and must not be near in damp place or where it is liable to be sprayed with water..

Make sure that there are must have a minimum 15cm of clearance at rear, top, and sides of the machine for proper air circulation

The unit should be located on a firm and level foundation. It's important for the ice maker to be level in order to work properly. If needed, level the unit in both left to right and front to rear direction by adjusting the leg.

When ambient temperature is too low, please drain the ice maker to prevent damage.

Electrical Connection

Before you move your ice maker into its final location, it is important to make sure you have the proper electrical connection in accordance with the appliance rating label and local authority regulations.

Please refer to the rating plate on the rear of the machine for the correct electrical rating and make sure whether is the receptacles is corresponds with the local regulations codes and ordinances.

The ice maker requires an individual power supply of proper capacity. Failure to use an independent power supply of proper capacity may result a tripped breaker, blown fuse, damage to existing wiring or component failure.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Do not pull the power cord.

The fuse size should be 15 amperes.

The maximum allowable voltage variation is ± 10 percent of the rating label.

High humidity will increase the electrical circuit and potential risk of electric shock. If any doubt, disconnect the machine from the electrical power.

Electrical specification

Make sure the ice maker electrical rating that correspond with the local regulations codes and ordinances .

Water supply and drain connection

The plumbing must be installed in accordance with local plumbing regulations.

A plumbing permit and service of a licensed may be required in accordance with local regulations

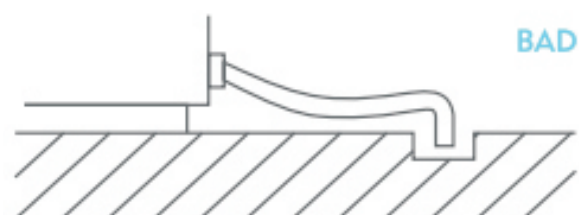
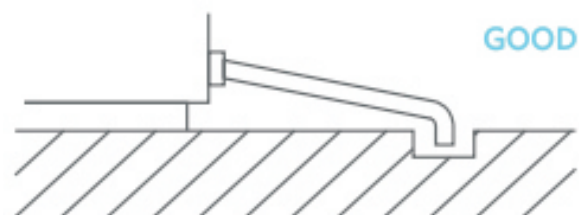
Water supply pressure should be minimum of 0.13Mpa and a maximum of 0.55 Mpa. If the pressure exceed0.55Mpa, the use of pressure reducing valve is required.

To prevent damage of the unit, do not operation the appliance when the water supply is off, or if the pressure is below 0.13Mpa.

All connection must be checked for leaks.

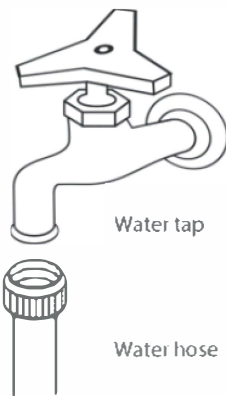
For gravity drain installation, drain pipes must have adequate pitch or fall on horizontal runs to get good flow. (150mm minimum).

To prevent a back flow into the appliance, please refer to below image for installing the drain pipe.



Attached the free end of inlet hose to the water supply tap . Hand tighten sufficiently to provide leak free joint. It is advisable to have the stop valve within easy reach.

Hand tighten flexible water hose onto the fitting on the rear of the ice maker as indicated (see below image)



* We strongly recommended the use of a water filter, A filter, if it is of the proper type, can remove taste and odors as well as particles and can prolong the life of the machine.

Water temperature(°C)	Water pressure(Mpa)	Water inlet(mm)	Drain outlet(mm)
Minimum10	0.13	Inside diameter 4	Inside diameter 20
Maximum35	0.55		

Final check list

- is the ice machine installed on a horizontal level surface?
- have all the electrical and plumbing connections been made? is the water supply and tap open?
- Has the voltage been tested and checked against the rating on rating plate?
- is all packing material and tape been removed from the interior and exterior of the ice maker?
- Do you clean the ice storage bin and cabinet?
- is there proper ventilation around ice maker for good airflow?
- do you switch on of the ice maker?
- do you check for leaks all water supply connection?
- is the ice maker earthed correctly?

After shutting off the machine you should wait at least 3 minutes before restart to avoid a damage of the compressor or other parts.

Your ice maker features a touch control display. Simply tap the button gently with your finger as easily and efficiently as possible. Operation board also provides the status information of the machine.

Do not use any pointed or sharp object to operate the touch display as they can damage the surface of the display.



Number window Display:


The number window display is able to shown ambient temperature, ice making period length, countdown rinse time. and delay on-timer of ice making.

Icon LED indicator: They are five icon led indicator to shown machine status "running", "icefull", "Error", "Timer", "Cleaning"

They are five press controller button "power", "clean", "timing" "up", "down".



Note: Refer detail error code explanation for the each number code that shown in number window.

Ice making: To start ice production, press on/off . "Power" LED illuminated on and the number 00 will be in number window, the ice making starts. To stop ice making, press on/off  ,ice making ends and machine will be in standby status automatically. "Power"

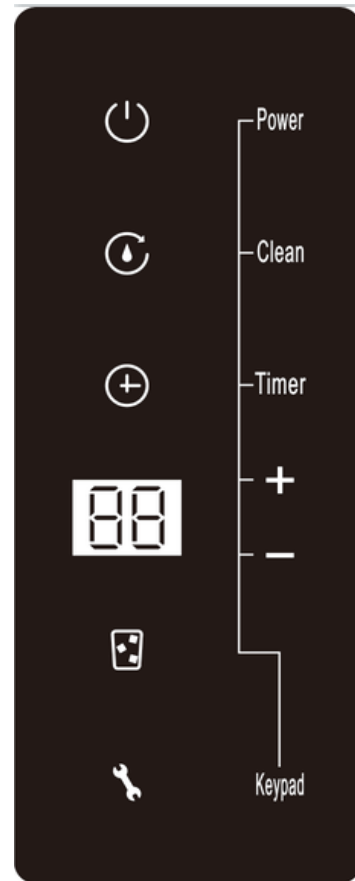
LED  keep flash and the number in digital window will shown ambient temperature.


Note: pressing the on/off button does not shut off to the ice maker.

Ice thickness adjust: To add or reduce the ice making period length for ice thickness selection, press up or

down   at the ice making cycle or ice full& standby status. Five flash time after setting, your desired setting will programed.

Note: They are 5 ice making period level for ice thickness selection, the default setting is 3level. 5 level is maximum, 1 level is minimum.



Icefull: When the ice storage is full , the "ice full" LED  is illuminated red, machine will stop work automatically, the number in the digital screen window will shown ambient temperature when the machine is at ice full status.

Clean:

1. In the standby state, touch the cleaning button for 3S, and the cleaning lamp will light up, and the cleaning process will enter.

2. After entering the cleaning program, the digital display F2 enters the deicing state. When the ice turning action is detected or the deicing time is greater than 3 minutes, the digital display 30 enters the countdown of the cleaning program,

3. After entering the cleaning countdown 40s, the water pump starts and starts spraying water. After the water pump runs for 10 minutes, the drainage valve starts to work. The ice water pump and the drainage valve work at the same time and close after 30S.

If cleaning and disinfection solvent is needed, it is recommended to add it after the cleaning procedure is started, and the water pump has just begun to pour water. It is recommended to disinfect it once a month,

4. After the water is injected within 40s, the water pump starts again, and the drainage valve starts to work after the water pump runs 2.5 minutes. The water pump and drainage valve work at the same time and close after 30 seconds.

After this step is repeated five times, exit the cleaning program, the cleaning is finished, the cleaning indicator is off, and the machine enters the standby state.

5. **The cleaning procedure is an automatic process without any other operation**



How to exit the cleaning program

1. After the cleaning program is finished, the machine will automatically exit and enter the standby state


2. Before the cleaning process is finished, you can touch the cleaning key and return in advance after 3 S
Clean out and return to standby. Touch the power switch during cleaning, then Stop cleaning and enter ice making state


3. During the ice making period or the ice full shutdown period, touching this key is invalid, cleaning the lamp quickly
Flash fast.

Timer:

How to set the on-timer of ice making:
 To set on-timer of ice making running, hold "timing"  for 3 second and release when "timing"  LED is illuminated on and the number is in display screen window and flash to display how many hours the machine will go on. During the number flash, then press up or down to add or remove hours, the default setting is 01. five flash time after setting, your desired setting will programmed.

To cancel the present delay on-timer of ice making:

1.hold "timing"  again for 3 second to cancel the setting, machine will back to standby status and do not make ice.


2.Press "power"  button will also cancel the timer, machine will programed ice making cycle immediately.

Note:The on-timer of ice making program have 12hours for selection, the maximum select is 12hours.

On-timer of Ice making program will only able to setting at standby status of the machine. If press "Timer" at the ice

making cycle or ice full status, "on-timer" program will unable to setting, time LED display will keep flash.

Error code explanation

When the "error" LED is illuminated red, the machine needs to be correct. Press "error" LED  illuminated red for 3 seconds and confirming a timer reset.

Error	Possible cause
E1	Water shortage
E2	Harvest overtime
E3	Condenser sensor open circuit or short circuit
E4	Evaporator sensor open circuit or short circuit
E5	Ambient sensor open circuit or short circuit
E6	Condenser hot temperature protection
E7	Ambient temperature is high or low
E8	Ice making overtime

How the Ice makers works

A general description of how the Ice cubers work is given below The remainder of the manual provide more detail

Ice making stage: when the power switch on, the compressor ,water pump and condenser fan motor will energize starting the freezer cycle and make ice. the water is circulated over the evaporators surface where the ice cube are formed. (when you first start your ice maker , the system will rinse itself before starting to make ice. The rinsing process takes about 3 minutes.)

When the desired thickness of the ice is fully formed , the freezing cycle ends and harvest cycle start.

Harvest

During the harvest cycle, the water inlet valve is energized.

The water will continue circulating to the water tank, and hot gas valveopens,diverting hot refrigerant gas

the evaporator. The gas warms the evaporator, causing the cubes to slide off the evaporator and into the storage bin. The next freezing cycle will restart when all the cubes drop into the bin.

Icefull

When the ice storage bin is full, the sheet of cubes will not fall completely and will hold the bin full probe open. The machine is in the bin full mode and the icefull LED is lighting with blip sound.

The unit starts making ice again automatically after ice cubes are removed. As ice is removed, the bin full probe swings back to operating position.

Noted:

Although the unit has been tested and cleaned at factory, due to long-term transit and storage, the first batch of cube must be discarded.

Do not turn the water supply tap off when ice maker is working

Do not touch the evaporator when the ice machine is running

Except to take ice from the unit, keep the door closed to reduce melting and insure proper ice formation.

Periodic cleaning and proper maintenance will ensure efficiency, top performance and long life

Warning

Disconnect electrical power before performing any cleaning or maintenance.

Inspection and cleaning should be done only by a qualified technician.

Don't clean the ice maker by spraying water.

Do not use any acidic or abrasive detergents, these types of cleaner may transfer taste, odor and damage or discolor the appliance.

Cloth containing cleaning solution may cause contamination if not disposed correctly.

Exterior cleaning

To clean the parts made of steel use a microfiber cloth and the sponge. Always use the cloth and sponge in the direction of the steel's satin finish.

Every now and then, to polish the steel, wipe with a slightly damp microfiber cloth.

Do not use abrasive or metallic products which could scratch and damage the stain finishing on the ice maker permanently

Interior cleaning

Clean the interior of the ice bin and removable parts by washing them with a solution of lukewarm water, a small amount of dish-washing detergent. Rinse and dry right away.

-Wash your hands , ice scoop and interior before taking ice.

-The storage bin is for ice use only,, do not store anything else in the bin

Water distribution tube cleaning

When you find that the ice cues are incompletely formed or the output of ice cubes is low, the water distribution tube may be blocked. Set the power switch to off. Unscrew the screws holding the top panel and remove the panel. You will see the water distribution tube. Rotate the tube so that holes in are facing up. Using a toothpick or similar tool, dredge the holes, if the tube is badly blocked, clean with a brush, clean the tube with a dilute solution of warm water and a mild detergent. After removing the dirt and lint from the surface, rinse the tube with clean water. rotate the water distribution tube back to its original position.

Air filter

The ice maker filter prevents ash and dust in the air from clogging the condenser. An air filter blockage will reduce the operational efficiency. We recommend clean air filter at least twice a months. Pull out the air filter and clean

the filter by vacuum. If serous blockage of air filter occur, clean the filter with neutral detergent and warm water. Wash and dry air filter, then re-install to ts original position.

Condenser cleaning

A dirty or clogged condenser prevent proper airflow, reduce the operational efficiency and causes higher than recommended operating temperature that may lead to component failure. We recommend clean condenser at least every six months.

-Remove the screw at the bottom of the front cover. Gently put off the front louver.

-Remove dirt and lint from the condenser fin and the unit compartment with a brush or vacuum cleaner.

-Reassembly the front cover and reconnect power.

Ice making system

Minerals that are removed out from water during the freezing cycle will eventually from hard, scaly deposit in the water system. Clean the system regularly helps remove the mineral scale build up. We recommend regular cleaning of ice maker's water system, although this unit has automatic cleaning function.

Do not use mechanical devices or other methods to speed up defrosting. Damage of the evaporator may result.

Preparing the ice maker for long storage

If the ice maker will not be used for a long time, or its to be move to another place, it will be necessary to drain the system of water.

- Turn control switch to "off" position and unplug ice maker or disconnect power.
- shut off the water supply and remove the water inlet pipe.
- Remove all ice out of the storage bin and cleaning the bin.
- Disconnect the silicone hose to discharge water from water tank, reconnect the hose after water drain completely.
- Leave the door open to allow for circulation and to prevent mold and mildew.

Most problems that occur during use can be easily corrected. With the help of the following guide, you will be able to find the causes of problem and rectify them.

Trouble shooting

Symptom	Possible Cause	Suggested correction
Ice making does not start	No electrical power or loose connections.	Check for loose and tighten or replace damage cord.
	power button is on off status.	Turn power to on status
	Fuse blown-out	check for short-circuit and replace.
	Voltage is too low than the rating level or its instability.	Cut off power and wait voltage recover or voltage correction before restart the machine
	the ambient temperature is too high	Get ambient temperature less than 38'c
	Water supply off and water supply cycle does not complete.	Check and open water supply tap or get recommend pressure
	float ball does not work or defective.	Clean or replace float ball
Compressor work but no ice is produced.	Loose connection or defective of controller board	Check for continuity and replace
	refrigerant is undercharge or leakage	check for leaks and recharge.
	Hot gas solenoid continues to open in ice making cycle.	check and replace.
	cooling system tube is clogged	check dry filter or replace.
	Compressor wiring loose or defective	Check for loose or replace.
No water come from spray tube.	Controller board connection loose or defective	Check for continuity and replace
	Water pump does not open	Check for loose connect, replace pump
	float ball does not work or defective.	Clean or replace float ball
	Water pressure too low and water is too low in water tank.	check and get recommended pressure
	Water system clogged	Clean
	Loose connection or defective of controller board	check for loose connection or replace.
Ice making slow	Water leakage	Check connections for water leak, and replace.
	Condenser or air filter is dirty	Clean
	Inadequate clearance around the ice machine	Get adequate clearance for good airflow
	condenser fan does not work or defective	check for loose connection or open and replace.
	High ambient temperature	Get ambient temperature less than 38'c

All ice formed on evaporator does not fall into bin in harvest cycle	Location out of horizontal level position	Locate machine in a horizontal leveled position
	Low ambient temperature	Get ambient temperature warmer than 15C.
	Hot gas solenoid does not work or defective.	check for loose connection or open and replace.
	Evaporator sensor does not work or defective	Check for loose or replace.
	Control board is defective	check for loose connection or open and replace.
Ice maker will not stop when bin is filled with ice	Bin control switch does not work or defective	Change water supply or make appropriate filter recommendations.
	Control board is defective	check for loose connection or replace.
Cloudy or irregular cube	Water spray guide dirty	Clean
	Poor incoming water quality or high hardness or contains impurities	Change water supply or make appropriate filter recommendations.

if you encounter any problem not covered in this manual, feel free to contact us, we will prove whatever assistance is necessary. You will need your product model, serial number when you request service or technical help, please provide the model, serial number which this information on the rating plate located on the back of your ice makers.

Dealer:	Installer:
installed on:	
Unit serial number:	

Before you calling for service:

Make sure the ice machine is plugged into electrical socket correctly and switch on.

Make sure the water supplier is connect well and tap is turned on.

Check the ice making power is on “power on” status