

In order to provide the best service, ATOSA

Please clean the filter frequently!

Requests that please register your warranty online

Please do not overload unit!

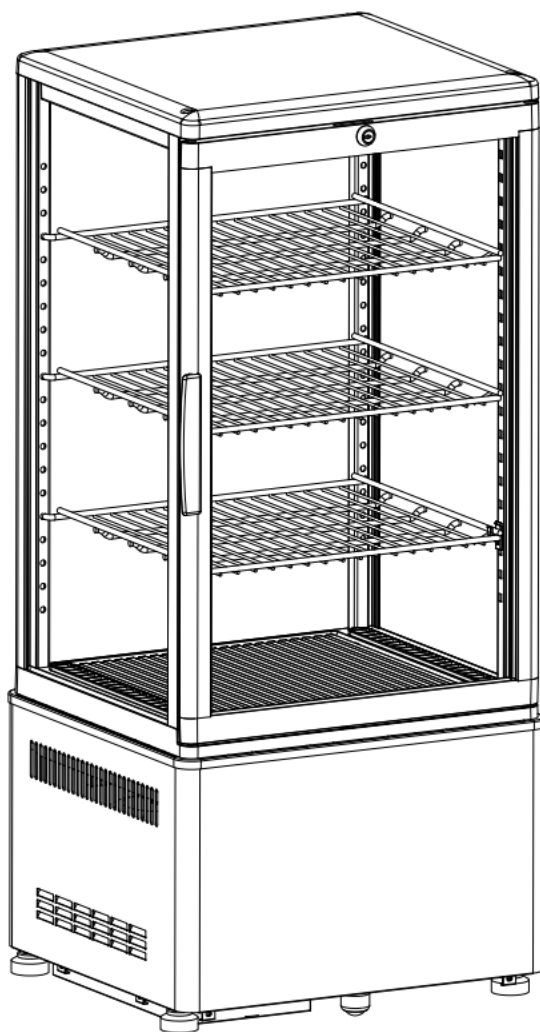
At www.atosausa.com

For any service issues, please kindly contact us at

Email: service@atosausa.com Or Toll Free: +1-800-683-8660

Diamond Showcase

Installation and Operation Manual



ATOSA

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Precaution

- 1 Please read the manual carefully before using the cabinet. For any doubt, please contact our company.
- 2 This series of products are mainly applicable to refrigeration and display cakes and relevant food. During normal operation, the temperature inside the cabinet is 35.6 ~ 53.6°F (for DSRC series and DSRS series). Do not use this equipment for other purposes in case of serious accidents.
- 3 The equipment is suitable to be placed in supermarket, cake store and hotels.
- 4 The equipment shall be put at dry place with good ventilation. Don't put it near any heat source or dust. Don't place it directly under the sunshine.
- 5 Put the equipment on a flat and solid place. The distance from the wall or other objects shall not be less than 10cm.
- 6 It is a kind of electrical equipment. Please pay attention to the safety.
 - Independently single-phase three-pole socket shall be used. The earth wire port (E) of the socket shall be reliably grounded.
 - The power supply shall be 115V/60Hz. Otherwise, power supply stabilizer with capacity matching with the equipment power shall be installed to ensure smooth operation of the equipment.
 - The power cord of the equipment shall not be directly placed in the aisle. Avoid heavy weight and sharp objects.
 - Do not operate the equipment with wet or naked hand or foot.
 - Please cut off the power supply if the equipment is not to be used for long time.
 - Please cut off the power supply before installation or dismantling the parts.
 - Never flush the equipment directly with water; otherwise the parts will get wet and current leakage might be resulted.
 - In case of electrical or refrigeration failure, service agent authorized by the manufacturer or professional maintenance staff shall be responsible for the maintenance work in case of danger or expanded failure.
- 7 Do not store explosive substances such as aerosol cans with a flammable propellant inside the appliance.
- 8 WARNING – Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.
- 9 WARNING – Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- 10 WARNING – Do not damage the refrigerant circuit.

11 WARNING – Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

12 Please according to local regulations regarding disposal of the appliance for its flammable blowing gas. Before you scrap the appliance, please take off the doors to prevent children trapped.



Warning: Risk of fire / flammable materials

CAUTION: RISK OF FIRE AND EXPLOSION WITH FLAMMABLE REFRIGERANT R290/
R600a.



13 If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

14 The maximum loading of every shelf is 22 lb (for DSRC series and DSRS series).

15 This appliance can be used by children aged from 8 years old and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they

have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

16 Children shall not play with the appliance.

17 Cleaning and user maintenance shall not be made by children without supervision.

Transportation and handling

- 1 Special package box will be used for the equipment for delivery. Keep the equipment erect during transportation and handling.
- 2 Please carefully check the package box after receiving the product to ensure that the equipment is not damaged during transportation.
- 3 When removing the package box, carefully move away the wood plate in case of scratch the equipment.
- 4 In case that the equipment tilts during the transportation and handling, the lubricant in the compressor may flow into the cooling loop. Therefore, in order to ensure the lubricant flows back to the compressor, it is necessary to keep the equipment erect for 24 hours before it starts to work.
- 5 Do not throw away the package removed randomly. Please dispose as per relevant local rules and regulations.

Installation and operation

- 1 Adjust the height of the four adjustable feet to the right position, and adjust the foot slowly until the level. After the equipment is installed, please carefully clean parts in the cabinet. Then wipe clean the bottom cover plate and shelf, put them on corresponding place, close the cabinet door and get it connected to the power supply.
- 2 Turn on the lighting switch, check light on each shelf is normal.
- 3 The controller is delivered with default parameters. Do not alter the parameters casually except for special need.
- 4 When running for the first time, it should run without load for 2 hours to ensure the refrigeration system is working normally. Only when the temperature within the cabinet is reduced within the indicated scope can the food be put into the cabinet.
- 5 Don't put too much over-hot food in the cabinet to prevent instantaneous high load. The food shall not block the air outlet and air inlet. Nor shall it be close to side glass. Otherwise it will lead to condensation.
- 6 To save electricity, the heating wire switch is defaulted to be closed. If the environment humidity is large, and there is condensation on the front glass, please open it for defogging.
- 7 To keep the taste of the food, please have the equipment running 24 hours a day.
- 8 During the frosting process, the temperature of the cabinet may rise slightly. When the frosting end, it will return to normal.

Maintenance

- 1 In order to ensure food health and quality, please ensure to that the equipment is cleaned frequently.
- 2 Before cleaning, plug off the power supply.
- 3 Use neutral detergent and mild water to clean the cabinet. To get rid of the residual of the detergent, please use clean cloth to wipe repeatedly.
- 4 Do not use any organize solvent (gasoline or alcohol etc.) to clean the equipment. Parts inside the equipment may be damaged. Besides, explosive gas may be generated.
- 5 Wet towel may be used to wipe the equipment surface. However, do not have it contact with water directly.
- 6 After cleaning the equipment, please ensure it is completely dried before using.
- 7 Handle with care. Unplug the wall socket first. Never tilt it over 45 degree during handling.
- 8 Sufficient space .Keep the rear unit no less than 10cm (4inch) from wall or other elements which will interfere with air flow.
- 9 Well environment. Always locate the refrigerator in a location with Ambient Temperature 16-32°C/60.8-89.6F The refrigerator may not work properly if the temperature is higher or lower than this range. For the first time use, wait for 2 hours before starting.
- 10 Far from heat source. Never place the refrigerator in direct sunlight. Do not locate near heat source that might affect performance
- 11 Do not load. Do not store materials or product on top of unit.
- 12 Altering Unit. Do not drill, cut or alter the unit as this will terminate warranty.
- 13 Stable location. Unpack and locate the refrigerator on a flat and solid place. It is better to service the refrigerator over a counter.
- 14 Exclusive power socket. Normally, the power supply should be 115V/60Hz single phase AC with exclusive single phase three pin receptacle
- 15 Do not share sockets. Never let the refrigerator share the common socket with other appliance. This might overload circuit causing fire or terminate warranty
- 16 Protect cables. Never break, alter, or damage the cables which might result in fire or damage.
- 17 No water splashes. Never splash water directly to the refrigerator. There is a risk of fire or electric shock.
- 18 Prevent from flammables and explosives. Never put any flammable or explosive products inside the refrigerator such as ether, gasoline alcohol, adhesive and explosive. Never put dangerous product nearby the refrigerator.
- 19 Flammable materials. Do not use paint or other flammable materials that might cause fire or damage.
- 20 Power failure. If power is interrupted to unit, please turn off and re-start in five (5) minutes.

21 Medical application. Never put medicine into refrigerator. This unit is designed exclusively for merchandising food. Do not use to store medicine or non-food products.

22 Rack. The rack is adjustable. Please follow instructions for adjustment.

—Take out the rack.

—Move the rack support on suitable height.

—Place rack on the support.

—To get an even temperature between top and bottom, please adjust to equal heights between each rack

23 Cautions

Shorten the door opening time and reduced opening frequency will help maintain consistent temperature.

Never block the air suction and outlet. Keep air circulation and refrigeration capability.

Do not overload unit or this will effect cooling efficiency.

Adjust the height of rack for proper food storage.

Food should be room temperature before loading in unit

This unit is designed for indoor applications only

Only authorized technicians approved by ATOSA can make repairs.

Never touch compressor to avoid injury.

This equipment is intended for the storage and display of items that are not potentially-hazardous such as bottle, can, securely packaged products.

24 Shut down refrigerator for extended time.

Take out all food and unplug the wall socket. Clean interior and exterior of the refrigerator thoroughly and open the door to sufficiently air dry. Caution with glass as it can be easily broken.

25 Note

The following conditions might exist during normal operation:

The sound of water is heard when the refrigerator is working. It is a normal operation that the coolant is circulating in the system

In wet season, condensation might be found on the exterior of the refrigerator. This is not an issue, this is caused by high humidity. Simply use cloth to wipe it down.

26 This appliance is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

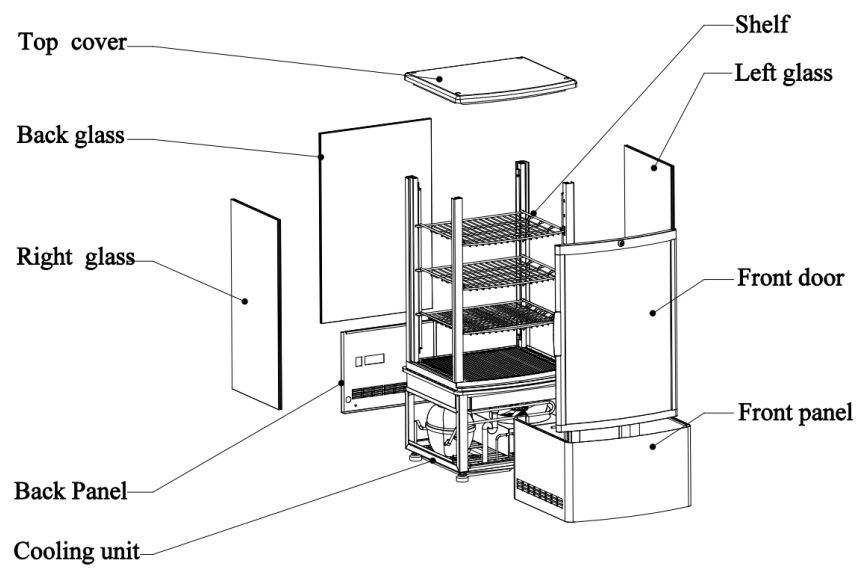
Troubleshooting

Troubles	Causes	Solutions
No power supply input	Poor socket contact	Repair or replace the socket
	Input control wire failure	Repair the failure point
High cabinet temperature	Near a heat source	Move the counter or the heat source
	Frost block	Defrost manually
	Over-inventory in the cabinet which blocks the air outlet and inlet	Take out part of the goods, move them away from the air outlet and inlet
	Refrigerant leaking	Check the leak and refill refrigerant
	Condenser contaminated	Clean the dust-hood
	Fan failure	Repair or replace the fan
	Temperature controller failure	Replace the temperature controller
	Temperature control probe touch the bottom	Replace the position of temperature control probe
Too much noise	The product is not put smoothly	Adjust the feet
	The set screws of fans or compressor are loose	Tighten the screws
The compressor is not running	The voltage is beyond the permitted range	Use a voltage regulator, and connect with the appropriate power supply
	Temperature controller failure	Replace the temperature controller
	The compressor damage	Replace the compressor
The light failure	Switch off or failure	Turn on the switch
	Wire connection is not reliable	Check the plug point
	The light power supply damaged	Replace the light power supply
	light damaged	Replace the light

Note:

1. For simple troubleshooting, please be sure to disconnect the power supply.
2. For the maintenance and replacement work, please call for professionals or the maintenance staff from the refrigeration factory of the manufacturer.
3. If the above methods could not solve the problem, please call for professionals.

Structure diagram



Note: refer to the real object in case of change of the product structure.

Setting of the digital controller



LEDs and associated functions

Tab.1

icon	function	normal operation			start up
		ON	OFF	blink	
	Compressor	on	off	request	ON
	fan	on	off	request	ON
	defrost	on	off	request	ON
AUX	aux	output on	output off	-	ON
	alarm	all	no alarm	-	ON
	clock	RTC fitted and enabled, at least 1 time band set	RTC not fitted or disabled, not even 1 time band set	-	ON if RTC fitted

Tab.2

button		normal operation		start up	
		pressing the button alone	pressed together		
	up ON/OFF	more than 3s toggle ON/OFF	pressed together start/stop continuous cycle	-	
	down defrost	more than 3s: start/stop defrost		Pressed together start parameter reset procedure	for 1s display firmware vers.code
	set mute	-1s: display/set the set point -more than 3s: access parameter Setting menu(enter password 22) -mute audible alarm (buzzer)		for 1s RESET current EZY set	

Setting the set point(desired temperature)

- 1.press **SET** for 1s the set value will start flashing after a few moments;
- 2.Increase or decrease the value using **UP** or **DOWN**;
- 3.Press **SET** to confirm the new value.

Switching the device ON/OFF

Press **UP** for more than 3s. the control and defrost algorithms are now disabled and the instrument displays the message “OFF” alternating with the temperature read by the set probe.

Manual defrost

Press for **DOWN** more than 3s (the defrost starts only the temperature conditions are valid).

Continuous cycle

Press **UP** and **DOWN** together for more than 3s.

Table of alarms

Alam code	buzzer and alarm relay	LED	Description	Parametri coninvolti
E0	active	ON	probe 1 error=control	-
E1	inactive	ON	probe 2 error=defrost	[d0=0/1]
E2	inactive	ON	probe 3 error=condenser	[A4=10]
IA	active	ON	external alarm	[A4=10][+A7]
dOr	active	ON	open door alarm	[A4=7/8][+A7]
LO	active	ON	low temperature alarm	[AL][Ad]
HI	active	ON	high temperature alarm	[Ah][Ad]
EE	inactive	ON	unit parameter error	-
EF	inactive	ON	operating parameter error	-
Ed	inactive	ON	defrost ended by timeout	[dP][dt][d4][A8]
dF	inactive	ON	defrost running	[d6=0]
cht	inactive	ON	condenser dirty pre-alarm	[A4=10]
CHT	active	ON	condenser dirty alarm	[A4=10]
EtC	inactive	ON	clock alarm	

The setting values for the products as follows:

Number	DESCRIPTION	VALUES	
		DSRC series	DSRS series
01	Set Point	35.6°F	35.6°F
02	Outputs activation delay at start up	1 min	1 min
03	Anti-short cycle delay	5 min	5 min
04	Interval between defrost cycles	4 h	4 h
05	Maximum length for defrost	15 min	15 min

Major technical parameters

1 These products are designed with climate type 3;

Model	storage temperature		Power supply	Rated power (W)	Refrigerant	Refrigerant Amount		Volume		Size/ D×W×H	
	(°C)	(°F)				(g)	(oz)	(L)	(cu.ft)	(mm)	(inch)
DSRC-20	2—12	36-54	115V/ 60Hz	195	R290	45	1.6	58	2	440×395×833	17.3×15.6×32.8
DSRC-24	2—12	36-54				45	1.6	68	2.4	440×395×913	17.3×15.6×35.9
DSRC-28	2—12	36-54				45	1.6	78	2.8	440×395×993	17.3×15.6×39.1
DSRC-31	2—12	36-54				45	1.6	88	3.1	440×395×1073	17.3×15.6×42.2
DSRC-35	2—12	36-54				45	1.6	98	3.5	440×395×1153	17.3×15.6×45.4

2 These products are designed with electric shock protection type I.

Disposal of the product



This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Warranty Information

2 YEAR WARRANTY

All claims for parts or labor must be made directly through Atosa. All claims must include: model number of the unit, the serial number, proof of purchase, date of installation, and all pertinent information supporting the alleged defect. In case of compressor replacement under warranty, either compressor or compressor tag must be returned to Atosa along with above listed information. ***Failure to comply with warranty policies will result in voiding claims.***

Two Year Parts & Labor Warranty

Atosa warrants all new refrigerated components, such as the cabinet and all parts, to be free from defects in materials or workmanship. Atosa's obligation under this warranty is limited to a period of two (2) years from the date of original installation or 27 months after shipment date from Atosa, whichever occurs first. All parts covered under this warranty that are defective within two (2) years of original installation or twenty seven (27) months after shipment date from manufacturer, whichever occurs first, are limited to repair or replacement (including labor charges, of defective parts or assemblies). The labor warranty shall include standard straight time labor charges only and reasonable travel time, as determined by Atosa.

Additional Three Year Compressor Warranty

In addition to the two (2) year warranty stated above, Atosa warrants its sealed compressor to be free from defects in both material and workmanship under normal and proper use and maintenance service for a period of three (3) additional years from the date of original installation, but not to exceed five (5) years. Compressors that have been determined to be defective from Atosa within this extended period will be either repaired or replaced with a compressor or compressor parts of similar design and capacity according to Atosa's discretion. The three (3) year extended compressor warranty applies only to sealed parts of the compressor and does not apply to any other parts or components. This includes, the cabinet, paint finish, temperature control, refrigerant, metering device, motor starting equipment, fan assembly, and other electrical components, etc.

R290 Compressor Warranty

The five-year compressor warranty detailed above will be void if the following procedure is not carefully adhered to:

1. This system contains R290 refrigerant and lubricant. The lubricant has rapid moisture absorbing qualities.
2. Drier replacement is very important and must be changed when a system is opened for servicing.
3. Micron level vacuums must be achieved to insure low moisture levels in the system.
4. Compressor must be obtained through Atosa, unless otherwise specified in writing, through Atosa's warranty department.

What is Not Covered by This Warranty

Atosa's sole obligation under this warranty is limited to either repair or replacement of parts, subject to the additional limitations below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

ROUTINE MAINTENANCE REQUIREMENTS MUST BE FOLLOWED OR WARRANTY IS VOID

Cleaning, Sanitation and Maintenance:

Ice machines require 3 types of maintenance: Removal of any build up of mineral scale from the ice machines water system and sensors, sanitize the ice machine's water system and ice storage bin or dispenser and cleaning the condenser.

NO CONSEQUENTIAL DAMAGES: ATOSA IS NOT RESPONSIBLE FOR ECONOMIC LOSS; PROFIT LOSS; OR SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOSSES, OR DAMAGES ARISING FROM FOOD OR PRODUCT SPOILAGE, REGARDLESS OF WHETHER OR NOT THEY RESULT FROM REFRIGERATION FAILURE.

WARRANTY IS NOT TRANSFERABLE: This warranty is not assignable and applies only in favor of the original purchaser/user to whom delivered. ANY SUCH ASSIGNMENT OR TRANSFER SHALL VOID THE WARRANTIES HEREIN AND SHALL VOID ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR LABOR COVERAGE FOR COMPONENT FAILURE OR OTHER THE WARRANTY PACKET PROVIDED WITH THE UNIT.

ALTERATION, NEGLIGENCE, ABUSE, MISUSE, ACCIDENT, DAMAGE DURING TRANSIT OR INSTALLATION, FIRE, FOOD, OR ACTS OF GOD: Atosa is not responsible for the repair or replacement of any parts that are determined to have been subjected after the date of manufacture to alteration, neglect, abuse, misuse, accident, damage during transit or installation, fire, flood, or act of God.

IMPROPER ELECTRICAL CONNECTIONS: Atosa IS NOT RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF FAILED OR DAMAGED COMPONENTS RESULTING FROM ELECTRICAL POWER FAILURE, THE USE OF EXTENSION CORDS, LOW VOLTAGE, OR VOLTAGE DROPS TO THE UNIT.

THE TWO (2) YEAR PARTS & LABOR WARRANTY AND THE ADDITIONAL THREE (3) YEAR COMPRESSOR WARRANTY ARE AS DESCRIBED ABOVE. THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, INCLUDING IMPLIED WARRANTY AND MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

Outside U.S. and Canada: This warranty does not apply to areas outside the continent of the United States. Atosa is not responsible for any warranty claims made on products sold or used in such areas.

In some cases, a 25% restocking fee may be charged to a buyer for returned items.
Atosa may at any time modify our equipment in order to provide and insure a superior product. Change is sometimes necessary to keep up with today's high standards in our industry. Atosa reserves the final interpretation of all public materials.

Model Number _____
Serial Number _____
Installation Date _____

2023.11.15

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