

OPERATION MANUAL ETC121S, ETC171S



TABLE OF CONTENTS

1.CONGRATULATIONS AND THANK YOU!	2
2.SYMBOLS IN MANUAL	3
3.ELECTRICAL CONNECTION NOTICE	4
4. WARNINGS & SAFETY	5
5. LIFTING AND TRANSPORTATION	7
6. DESCRIPTION OF THE MACHINE	8
7. TECHNICAL DATA	10
8. INSTALLATION	11
8.1 BEFORE THE INSTALLATION	11
8.2 SELECTION OF INSTALLATION PLACE	12
9. STARTING	13
10. USE	17
11.CLEANING	17

1.CONGRATULATIONS AND THANK YOU!

Thank you for choosing our product.

If you encounter a problem with machine, please contact your local service technician.

Please familiarize yourself with the machine by taking some time to study this manual. If you get to know this little ice-cream factory, it has the potential of making good profit.



BEFORE USING THE MACHINE READ CAREFULLY THIS MANUAL. PAY ATTENTION TO THE SAFETY INSTRUCTIONS.

2.SYMBOLS IN MANUAL



WARNING

When you see this symbol on your freezer or in this manual, be alert to the potential for personal injury. Follow recommended precautions and safe operating practices.



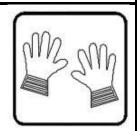
ELECTRIC DANGER

This symbol indicates the presence of electric shock hazards.



NOTE

It points out significant information for the stuff involved.



PROTECTIONS

This symbol means that operator must use protection against an implicit risk of accident.



MACHINE OPERATOR

He/She is the person who has no specific expertise and she/he will operate the freezer.



MAINTENANCE ENGINEER

He/She is a skilled engineer for the operation of the machine under normal conditions; he/she is able to carry out interventions on mechanical parts and all adjustments, as well as maintenance and repairs. He/She is qualified for interventions on electrical and refrigeration components.

3.ELECTRICAL CONNECTION NOTICE



- 1. Please make sure that the power supply conforms to the electrical data label (Rating Plate).
- 2. Check the data label (Rating Plate) for the required circuit breaker amperage. Only plug into an electrical wall socket that complies with the required amperage of the machine.
- 3. Machine should be installed according to the local authority electrical code/regulations it is used in, as well as to other work health and safety requirements. If you are not sure, please contact your local authority for details.



4. This symbol indicates the presence of electric shock hazards. Inside the enclosures of the machine there are electrical shock hazards, therefore, **DO NOT** remove any panels if you are not a qualified technician of an authorized service provider.



- 5. **WARNING**: To avoid risk of injury from electric shock, if you are not a qualified and duly authorized service technician, do not open the enclosure panels on the sides and back of the machine.
- 6. The power supply must be properly grounded to prevent electrical shock. Check with a qualified installer for compliance.
- 7. The fuse must be 220-240V, 50 Hz 16 Amp or 380-400V, 50 Hz 16 Amp (Before plugging in the machine, see metallised label on the back of the machine.)

4. WARNINGS & SAFETY



Read and understand all safety messages in this manual. The information provided in this manual concerns your safety. Read and understand the safety decals on your freezer. To safeguard both the display unit and the operator, all safety equipment must be kept in good working order. Take notice of the location of all decals on the freezer and keep the safety decals in good condition. Check them periodically and replace missing, damaged or illegible safety decals. The safety decals must remain in place and legible for the life of the freezer.

Keep your Freezer clean and tidy. Please note the following WARNINGS:



- ➤ The installation must be completed by a qualified technician, following the manufacturer's instructions.
- Never allow the power cord to come into contact with heat sources or sharp surfaces. The power cable should not sag over the working surface.
- ➤ The power cable should not be folded, twisted or tangled and must always be kept fully open.



- Do NOT move or lift the device while the device is running.
- > **Do NOT** damage the parts of the refrigeration cycle.
- > Always follow local authority food safety and other health codes.
- Always follow in-store operating and food hygiene safety and other health code.
- Do not clean the machine with high-pressure water.
- Use potable water to clean the parts.
- ➤ **Do NOT** use the machine before studying this User Guide. Failure to follow this instruction may result in equipment damage, poor performance, health hazards or personal injury.
- ➤ A potential risk exists if the User Guide instructions and other safety precautions are not strictly followed.
- ➤ Do NOT allow anyone to attempt any repairs to the machine, unless the main power supply to it has been disconnected from the power supply point.











- ➤ Never open the panels to reach inside the Freezer body. (Only by authorized technicians)
- ➤ Technical maintenance must be done by authorized technicians.
- ➤ Using non-original spare parts can cause the display unit to malfunction in a way that is hazardous for the operator and persons in the vicinity.
- ➤ Do not, under any circumstances, modify any part of the display unit without express authorisation in writing from the manufacturer.
- ➤ The display unit should only be used by authorized personnel. These personnel must be one who has read the instructions in full, having understood the concepts expressed in the publication and, if necessary, having received the training given by the manufacturer.

5. LIFTING AND TRANSPORTATION

WARNINGS FOR SAFE OPERATION



Pay due attention to legally required safety measures.

At work wear suitable clothing. Do not wear ties, jeweler's chains or belts, which could get caught in the machine.



Do not shift or dislocate the safety switches or protective parts. Make sure that the lifting device is in good condition and that its load Capacity exceeds the weight of the appliance (refer to the technical specifications data sheet).

Lift the appliance following the instructions for its use and maintenance, Pay attention to the handling and handgrip locations. The use of a suitable lifting device is recommended.



While lifting or moving the appliance do not stand under the machine. Do not turn the appliance after holding the cables or the water hose has lifted it.

If you have to attend to any work higher up above the appliance, you should use a suitable ladder and not the appliance for support.



On reception, check that the delivery is conforming to the order and the user instructions are included. On delivery of the display unit, check for damage and missing parts. If you find any damage or missing parts, contact the manufacturer or local representative. On reception of the goods, report any non-conformities, missing materials or evident damage immediately to the manufacturer, note them on the delivery document and send a detailed claim to the shipping agent's insurance company, complete with photographs.

6. DESCRIPTION OF THE MACHINE

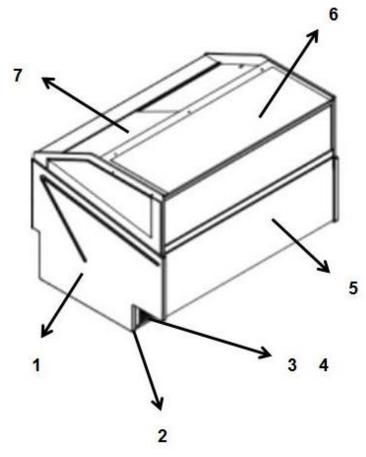


Figure 1

NO	PART NAME	
1	Foamed Tube	
2	Basement	
3	Refrigeration System 1	
4	Electrical Equipment	
5	Front Panel	
6	Glass Frame	1
7	Inner Tube	1

Table 1

1. FOAMED TUBE

It is the insulating element which keeps the system cold. Its interior is made of stainless steel and its exterior is made of galvanized or laminated stainless steel.

2. BASEMENT

The basement supports the machine. It is made of galvanized or coated metal tubing. It contains electrical equipment and condenser and condensate extraction system.

3. REFRIGERATION SYSTEM

The Refrigeration system generates the cold to maintaining the product at the correct temperature. The basic units are the compressor, lamination unit, evaporator and condenser. The compressor may be hermetic or semi-hermetic, with different voltage ratings. The evaporator is fan-powered, made of copper with aluminum fins and is located inside the insulated tank. For details, refer to the technical drawings. The machine contains fluorinated greenhouse effect gases and gas operation depends on these.

4. ELECTRICAL EQUIPMENT

The Electrical system controls the operation of the display unit with its control board. It will vary in relation to the ordered voltage, phases and frequency. The electrical enclosure with the control board is always located inside the base when present.

5. FRONT PANEL

It is the exterior of the device and generally facing the customer.

6. GLASS FRAME

The Glass frame protects the product while displaying it to clients. All glass surfaces are heated. The roof is supported by plexiglass pillars that can resist a maximum weight of 10 kg. The lighting of the cabinet is provided by LED bars with aluminum profile, fixed on a proper metal support on the rooftop.

7. INNER TUBE

The Inner tube contains the tubs or the pans for the exposure of the products. They are made in stainless steel.

7. TECHNICAL DATA

Features	ETC121S	ETC171S
Dimension (mm)	1201 x 1167 x 1215	1775 x 1205 x 1175
Pan Capacity (Lt)	12 x 5 lt - 8 x 7 lt	18 x 5 lt - 12 x 7 lt
Power Consumption (Standard) (W)	1650 W	2400 W
Power Consumption (Defrost) (W)	2530 W	3700 W
Refrigerant	R452a	R452a
Operation Temperature °C	-18 / -22 °C	-18 / -22 °C
Power Supply	230 V / 50 Hz	230 V / 50 Hz

Table 2

8. INSTALLATION

8.1 BEFORE THE INSTALLATION

The following must be observed before using the product and installing.

- ➤ Do not place your product in the area of direct sunlight, heat sources such as stove, heating pad, oven, cooker, radiant and infrared.
- Otherwise, this may cause the performance of your product to fall, become damaged or unusable.
- ➤ Your product is set to 220 240 V 50 Hz city electricity. Using a different voltage may cause the cooler to become unusable and cause a fire.
- Our company is not responsible for any malfunctions or damages that may arise in the event of usage without grounding.
- ➤ In the event of a sudden power cut, remove the plug from the outlet. For re-start, wait 20 minutes after the electricity arrives; put the product's plug prize. The high voltage that occurs when the electricity first comes on can cause damage to your product and cause fire.
- The product you have purchased has been designed and manufactured with the intention of exposing only open or packed ice cream. Please do not use it for other purposes.
- ➤ Your product does not have sterilization effect on microorganisms. Therefore the food you put in your product must be in accordance with the hygiene requirements. Otherwise, microorganisms that grow in food can threaten your health.
- > Do not put any material that should not cool into your product. Do not use your product to thawing frozen foods.
- ➤ Fluid leaks from freezing cans that are not properly positioned can cause corrosion in the metal part of your freezer display cabinet, gas escape in the cooling circuit, or wrapping or cracking in plastic parts. Together with these hygiene conditions of the odor to disappear, urea by microorganisms can cause health threat to come to satisfactory levels.

8.2 SELECTION OF INSTALLATION PLACE

In order for your product to work smoothly, the environment in which the it will work is very important. Before you install the product, pay attention to the following items.

- Do not position your product so that it is exposed to open air.
- ➤ Be careful not to put cardboard, box material etc. in front of the bottom louvres so that your product can cool well.
- > Take care to position your product away from sources of heat or heat.
- Your product is positioned at a point far from where the air flow is intense.
- ➤ Do not locate your product where the direct sunlight is going. It will increase the operating time of the product coming into direct sunlight will increase the energy consumption of glass.
- ➤ If your showcase is located on the right, left or front wall or any device, it is recommended that you leave a clearance of at least 15 cm between the product and any surfaces or devices that will shut the product down.
- ➤ Whatever your circumstances, turning off the compressor ventilation of your product will adversely affect the performance of your device.
- > Do not place your product on a sloping surface to avoid any falling or tipping problems.

9. STARTING

Before operating the product, clean the product according to the cleaning instructions. The components on the control panel at the bottom of the product and their working modes are as follows.



Green Key: It provides energy to the device. Yellow Key: The LED on the device allows the lights to be turned on. Dixell Digital Thermostat: Electronic multi-purpose thermostat that adjusts the temperature.

Your product's internal temperature is set in our factory so that you can keep and protect your food stored in the appliance. You can check the internal temperature of the product from the digital thermostat display on the control panel. You can also adjust the desired temperature with this thermostat.

If you run your product at the factory set temperature, you will get the best results both in terms of performance and energy consumption.

Run your product for at least 3 hours. This ensures homogeneous heat distribution throughout the device.

The digital thermostat on the product is set in the factory and does not require adjustment. You can change the digital thermostat as follows. Digital thermostats contain many parameters. If you think there is a problem with the cooling of your device, please contact the technical service.





To display and modify target set point; in programming mode it selects a parameter or confirm an operation. By holding it pressed for 3 sec when max or min temperature is displayed it will be erased.



(UP) To see the max stored temperature; in programming mode it browses the parameter codes or increases the displayed value. By holding it pressed for 3s the fast freezing cycle is started.



(DOWN) To see the min stored temperature; in programming mode it browses the parameter codes or decreases the displayed value.



(DEF) By holding it pressed for 3 sec the defrost is started.



(LIG) Switch ON and OFF the cold room light.



(ON/OFF) Switch ON and OFF the instrument

KEY COMBINATIONS



To enter the programming mode.



To exit the programming mode.

USE OF LEDS

Each LED function is described in the following table.

LED	Mode	Function	
*	ON	Compressor enabled	
	FLASHING	- Programming Phase (flashing with LED [♣]) - Anti-short cycle delay enabled	
	ON	Fans enabled	
*	FLASHING	Programming Phase (flashing with LED **)	
*	ON	The defrost is enabled	
	FLASHING	Defrost or drip time in progress	
92	ON	The controller is working in "ALL" mode	
	FLASHING	The controller is working in remote virtual display mode	
(b)	ON	An alarm is active	

How To See And Modify The Set Point



To modify the set-point:

1. Press and hold the SET button for more than 3 seconds: the LED



starts to flash;

- 2. Modify the value using and keys;
- 3. Memorize the new set value pressing again SET button. The value will flash. Wait at least 15 seconds to exit from setpoint programming mode.

How To Start A Manual Defrost



- 1. Push the DEF key for more than 3 seconds and a manual defrost will start.
- 2. Use the UP and DOWN keys to select the dEF1 or the dEF2.

On/Off Function

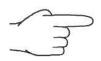


By pushing the ON/OFF key, the instrument shows "OFF". During the OFF status, all the relays are switched OFF and the regulations are stopped; if a monitoring system is connected, it does not record the instrument data and alarms.

LOCAL ALARMS

Display	Cause	State of Outputs
PoF	Keyboard locked	
Pon	Keyboard unlocked	
rst	Alarm muting	
noP	Probe not present	
noL	Absence of communication keyboard-main unit	
P1	Room probe failure	Compressor output acc. to par. Con and CoF
P2	Evaparator probe failure	Outputs Unchanged
BAL	Blockage alarm from digital input	Regulation outputs deactivated
rtc	Clock alarm	Unchanged
rtF	Clock alarm failure / not present	Alarm output active, other outputs unchanged

10. USE



Be sure to read the manual carefully before using the device.



Before you start up the machine, the following must be checked by licensed and specialised technical staff:

- System hooked up and earthed correctly.
- System hooked up to its electrical and water supplies correctly.

The machine is designed to expose the ice cream to the temperature requested by the client, which may not be lower than -18/-20°C.

After the refrigeration function has been started, wait for approximately 60 minutes before placing the ice cream inside the display unit, so that the operating temperature has time to stabilise. This period may vary in relation to the ambient conditions.

11. CLEANING

Cleaning the appliance must be divided into internal and external.

You must follow those articles before you start cleaning.



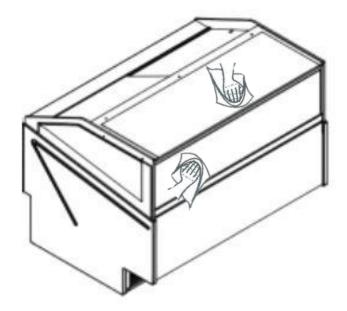
Stainless Steel parts of the device: Use only warm water and non-aggressive detergents.

Polycarbon and Acrylic parts of the device: Wash with warm water using a soft cloth or chamois cloth.

Glass parts of the device: Use specially manufactured products to clean the glass.



Do not peel ice that may form on the device wall during cleaning with sharp tools. You can damage the surface.



- Remove the product stored in the cooling compartment of the device and place it in the housing of a special refrigerator to ensure proper storage.
- > Disconnect the electrical connection by pulling the device's plug from the socket.
- Remove all equipment that can be removed manually. (Ice cream cuvette, sleds etc.)
- Wait for 4 to 6 hours until the ice melts on the evaporator before cleaning.
- > To speed up the defrosting process, do not follow any other way recommended by the manufacturer.
- ➤ Clean the side panels and the bottom of the pool using a mild detergent, warm water and a cloth or sponge. Do not use sharp tools. Rinse thoroughly and dry with absorbent cloth.
- Replace the accessories you removed.
- ➤ Operate the appliance and wait for the temperature of the appliance to reach the desired temperature before putting back the products to be stored in it.

