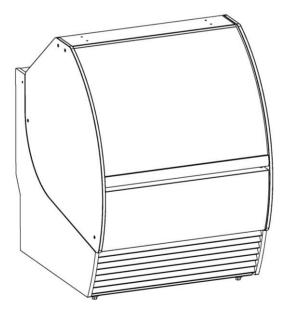
Please read carefully before use

# Instructions for Ice Cream Display Freezer



## Foreword

#### Dear users:

Welcome and thank you for using our ice cream display freezer! This product is an internationally advanced product developed by our Company according to the needs of the market and with reference to foreign advanced refrigeration technology.

The exterior of this product series is designed with European popular styles of luxurious and stylish appearance, which can maximize the display of your ice cream to be sold: the internal design is reasonable, the raw material of the internal plate adopts food-specific stainless steel. The advanced evaporator design ensures the reliable refrigeration effect, and the advanced hot gas defrosting system saves energy and electricity.

Our products can be widely used in places of ice cream stores, western-style restaurants, coffee shops, high-end buffets, movie theaters, beaches.

In order to better use our products and extend the service life of the products, please read this "INSTRUCTIONS" carefully before use.

Model	Dimensions (L*W*H) mm	Cabinet temperature °C	Power V/ph/Hz	Input power W
ETHA1711	1728*1125*1350			1460
ETHA1710	1728*1092*1300	−16°C~−18°C	220~240/1/50	1460
SPEWRHA12	2146*1011*2435			1040
SPEWEHA12	2146*1011*2435			1040

# Product Specifications and Parameters

1. MILAN Series (MILAN)

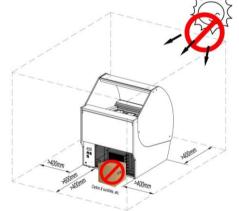
## Handling and placement

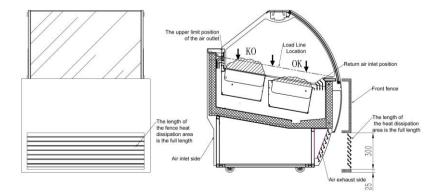
1. During the handling process, the inclination angle of the tank should not be greater than 45 degrees to avoid unnecessary damage;

2. This product should be placed in a ventilated and dry place, the ambient temperature of the working condition should be less than 32 °C ( $\leq$  32°C), and the ambient humidity should be less than 60% ( $\leq$  60%). At the same time, this product should be kept away from the heat source, avoid direct blowing of rear sliding door at air conditioner outlet, and avoid direct sunlight, and avoid being placed in the environments of seaside and outdoor;

<u>3.</u> Before use, the packaging items should be removed from all parts of the display freezer to prevent the normal operation of the display freezer from being affected, otherwise, unnecessary losses may be incurred;

4. The ventilation places in the front and rear of the equipment must be well ventilated, and no obstacles or heat sources are allowed to enter. A certain distance must be left on each side of the equipment, which must not be less than the size shown in the f





#### Power Requirements

1. This rated voltage of the product is 230V, and the voltage fluctuation must comply with the national regulations, that is, the fluctuation range should be within 10%;

2. The socket that supplies power to this product must be a two-hole or European standard socket with independent lines. The maximum current allowed by the socket must be larger than 16A ( $\geq$ 16A). The reliable grounding wire shall be equipped, and not be connected with the gas pipeline and the water pipe;

#### Startup and Operation

1. Before starting the machine, use the 4 adjustable feet at the bottom of the cabinet to level the ice cream display freezer;

2. Before starting the machine, carefully check the installation of the equipment according to the requirements of the instruction manual, and leave the equipment to stand for more than 12 hours in advance;

3. After turning on the power supply and turning on the main switch and refrigeration switch, through a delay of 3 minutes, the compressor will run automatically;

4. Check whether the compressor is running normally and the indicator lights work in a normal manner;

5. After the compressor runs for 15 minutes, the temperature in the display freezer cabinet must drop significantly, indicating that the display freezer is operating normally and can be used with confidence, otherwise, shut down the display freezer immediately for inspection;

Note: The commissioning of the temperature controllers has already been performed in a strict manner before leaving the factory. Those who have not been trained or have not read the instructions carefully shall not be authorized ro adjust them.

#### Placing Ice Cream into Display Freezer

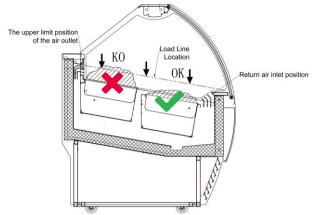
1. The time of putting ice cream food into the empty machine each time: ice cream can be put into the display freezer only after the display freezer reaches the storage temperature and stops automatically.

2. The display freezer must be kept clean when the ice cream is put in, and no ice cream should fall into the cabinet. If foreign matters are found in the evaporator, they must be cleaned in time to prevent the peculiar smell caused by the untimely

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cleaning of the scattered food in the cabinet.

3. The ice cream shape should not extend to the position of the air outlet in the cabinet, so as not to cause the ice cream to melt (as shown in the figure below).



### Daily Use Precautions

After the store is closed at night, take out the ice cream and store it in the chest freezer. Unplug the ice cream display freezer, wipe the its interior and exterior, and open the rear sliding door, which can reduce energy consumption, better ensure the operation stability of the equipment and prolong the service life of the equipment.

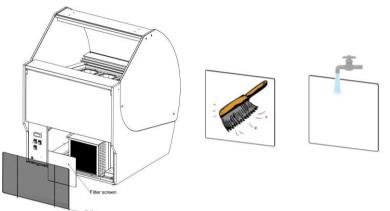
### Routine Care and Maintenance

1. The aluminum alloy surface will produce some stains after a long time of use. You can wipe with a towel dipped in banana oil or alcohol.

2. Because the parameters of the temperature controller of each ice cream cabinet are strictly set before leaving the factory. Non-professionals are not allowed to make adjustments without authorization. Even professionals are merely allowed to adjust the temperature in the ice cream display freezer's cabinet as needed.

3. During daily working hours, it is necessary to frequently observe the temperature changes in the display freezer's cabinet and whether the indicators are normal. In case of any problem, please immediately get in touch with professional maintenance personnel to solve the fault in time.

4. Check the dust on the filter screen of the condenser according to the actual use environment. Under normal circumstances, it is recommended to clean it once a month. If the environment is relatively hostile, inspection and cleaning shall be performed at any time. Dust removal method: (1) Unplug the power plug. (2) Remove the rear grille. (3) Pull out the filter screen from the condenser, rinse the filter screen with clean water or tap lightly in an open and ventilated place to knock off the dust. Use a brush to remove dust from the condenser. (4) Place the filter screen and grille into place again, plug in the power supply, and restart the machine.

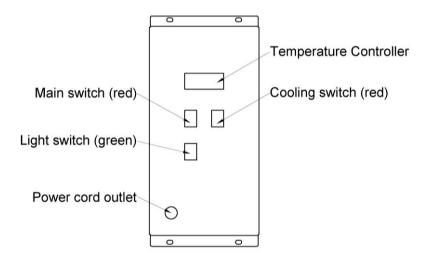


5. Regular defrosting shall be required to ensure normal cooling of the equipment. It is recommended to perform manual defrosting once a month under standard working conditions, and to perform manual defrosting once a week in high humidity environments. Operation steps: (1) Take out the items in the display freezer's cabinet, press and hold the button of "snowflake" on the thermostat for more than three seconds, the equipment will make a "puchi" sound, and the temperature controller display panel will display the word of "DEF". (2) Open the sliding door of the equipment, turn off the switch of the equipment after waiting for 3 minutes, and unplug the power supply.

6. It must be ensured that the inside of the ice cream display freezer's cabinet shall be cleaned every 4 to 7 days. Wipe the inner and outer surfaces of the display freezer with warm water and an appropriate amount of neutral detergent to keep the inside and outside of the display freezer clean. It is strictly forbidden to wipe it with boiling water, chemical thinners, gasoline, kerosene, volatile solvents and descaling powder to prevent damage to the display freezer. Special attention is required here! Before rinsing it with clean water, the drain pipe in the machinery space must be removed and placed in an empty bucket to receive water, otherwise,

if there is too much water during the cleaning process, water will overflow from the water receiving box, resulting in a short circuit when the machine is turned on! !! If the operation is not carried out in accordance with the requirements of the INSTRUCTION manual, the user shall be responsible for the loss.

7. After cleaning the inside of the ice cream display freezer's cabinet, the equipment cannot be turned on immediately. It must be ensured that it is turned on after 6 hours after cleaning. **Control Panel** 



Temperature Adjustment



Indicator	Symbol	Status	Meaning	
Setting	Set	ON	Parameter setting	
		OFF	Status of temperature measuring and	
			controlling	
Refrigeration	***	ON	Refrigeration work	
	ሻጽ	OFF	Refrigeration stop	
		FLASH	Refrigeration time delay	
Defrost	0N Defrost work		Defrost work	
		OFF	Defrost stop	
Fan	ЗЕ С	ON	Fan work	
		OFF	Fan stop	
Defrost dripping	drip	ON	Start defrost dripping	
		OFF	Stop defrost dripping	
Door switch	Ĵ	ON	Cabinet door open	
		OFF	Cabinet door close	

Keys	Function	Button action	
Set	Enter the status of parameter setting	pressing the keys for 3s	
	Switch between menu and parameter;	Press the response	
Adjust menu and parameters;		Press the response	
<b>_X</b> -	Open/close light(only valid for the model	Press the response	
	Upload the data to copy card	pressing the keys for 3s	

ۍ	Adjust menu and parameters	Press the response	
	Download the copy card	pressing the keys for 3s	
Rst	View evaporator sensor temperature	Press the response	
Rst	Exit from parameter setting;	Press the response	
	Press 3s to forced switch between refrigeration, defrost/defrost	pressing the keys for 3s	
	delay,		

#### 1) Parameter Adjustment

Press the key of Set for 3 seconds in the measurement and control state to enter the user menu and display St. Press the key of Set again to display the parameter value of St. At this time, the temperature setting can be

modified by operating the key of  $\overset{}{\longrightarrow}$  or  $\overset{}{\longrightarrow}$  .

When St is being displayed, after pressing the key of  $\overset{\sim}{\longrightarrow}$ , Po will be displayed, and after pressing the key of Set, OO is then displayed. At this time, the controller administrator menu password can be input through

the key of  $\checkmark$  or  $\checkmark$ . After entering the controller administrator menu password, press the key of Set (confirming the completion of the password input), and Po will be displayed. The controller will automatically verify the correctness of the password. When the password verification is passed (entering the administrator menu), select parameter items of St, Po, C1, C2...ul (that is, any parameter item in the user menu and manager menu)

by pressing the key of  $\overset{}{\longrightarrow}$  or  $\overset{}{\longrightarrow}$ , otherwise, the controller only stays in the parameter items of St and Po, and disables the display of other parameter items.

After selecting a menu item, press the key of Set to enter the parameter

setting of the current menu item, press the key of  $\overset{}{\longrightarrow}$  or  $\overset{}{\longrightarrow}$  to adjust the parameter value, and then press the key of Set to return to the menu selection.

In any parameter setting state, pressing the key of  $\overset{\longrightarrow}{\longrightarrow}$  for 30 seconds or no key operation for 30 seconds will exit the parameter setting state while automatically saving the current parameter value.

Note: The administrator menu password is valid for a single input.

After pressing the key of to exit the parameter setting, the correct password must be input again for the next adjustment.

2) Checking temperature: in the measurement and control state, press the key of to check the current temperature measurement value of the evaporator sensor (the evaporator sensor is enabled and normal)
3) Manual forced operation

In the measurement and control state, after pressing the key of for 3 seconds, the forced toggling among states of cooling, defrosting/defrosting delay, and defrosting water-dripping. Press the key

of  $\overset{\circ}{\longrightarrow}$  to turn on or off the light (only valid when the light/alarm relay is used as a light and there is no linkage between the light control and the door switch).

## Alarming code Alarming reason E1 Display freezer cabinet temperature sensor Evaporator sensor failure E2 Condenser sensor failure E3 Condenser high temperature alarm cH rH Display freezer cabinet temperature high Cabinet temperature low temperature alarm rL Copy card programming failed $\mathbf{Er}$ The data in the copy card is inconsistent with EP the controller model, leading to programming

## 4) Temperature controller alarm output

## Precautions

It is strictly forbidden to store inflammable, explosive, strong acid and alkali corrosive items in the display freezer, such as: butane, sulfuric acid, agglomerant, alcohol, etc.;

1. The compressor of the display freezer shall not be restarted continuously. In any case, the compressor must be restarted after an interval of 4 to 5 minutes after each power failure;

2. During the use of the display freezer, in case of any abnormal situation, such as abnormal noise, smell, smoke, etc., the power supply should be cut off immediately, and professional maintenance personnel shall be asked to conduct a thorough inspection. Do not turn it on again until the fault is eliminated.

3. When defrosting the ice cream display freezer's cabinet, the mist will emerge inside the front glass, which is a normal phenomenon. When the defrosting is over, the mist will disappear automatically.

# Self-judgment and handling of minor faults:

No.	Faults	Phenomenon	Causes	Troubleshooting
	Compressor	compressor	The compressor	Switch off and
	internal	shuts down, temperature		cut off the power
	thermostat		rises to a high	to cool the
	action		temperature	compressor, and
1			(this phenomenon	the compressor
			may only occur	will reset
			when the ambient	automatically
			temperature is	after cooling.
			too high)	
	High	compressor	The ambient	Sweep the
	voltage	shuts down,	temperature is	condenser, add
2	switch		too high, or the	shading or
	action		condenser is too	ventilation to
			dirty	enable automatic
				reset
3	Blown fuse	compressor	There is a short	Check wiring to
J		shutdown	circuit	replace fuse
	Poor	It feels a	Poor grounding or	Add effective
	grounding	little	no ground wire	grounding
		prickly when		
4		you touch		
		the display		
		freezer		
		cabinet		

# Packing List

- 1. User Manual Warranty Certificate: 1 copy
- 2. 3A fuse
  - According to the different requirements of different customers, the parts and quantities in the packing list may slightly differ.