

# Haier



## Pharmaceutical Refrigerator Operation Manual

Certificate of Quality

checker:

Manufacturer: Qingdao Haier Biomedical Co., Ltd.  
Address: Haier Industrial Park, Economic Technology Development  
Zone, Qingdao P.R. China  
Web: [www.haiermedical.com](http://www.haiermedical.com)  
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V13026



Model  
HYC-68  
HYC-68A  
HYC-118  
HYC-118A

- Read the Operation Manual carefully before using your appliance.
- Keep the Operation Manual in a safe place.
- Appearance, color and layout of the door may vary.
- Translation of the original instruction.
- Haier pharmaceutical refrigerators are applicable for the storage of pharmaceutical products, medicines, and other laboratory products that need to be stored at a temperature of 2°C to 8°C.

## Content

Safety Precautions .....	1
Usage Precautions .....	5
Product Installation .....	7
Component Names .....	11
Application method .....	13
Cleaning and Maintenance .....	15
FAQ .....	16
Alarm .....	17
Refrigeration Schematic • Wiring Diagram .....	18
Specification • Packing List .....	19

### Packing List

Model	HYC-68	HYC-68A	HYC-118	HYC-118A
Operation Manual	1	1	1	1
Plastic bag	1	1	1	1
Key	2	2	2	2
Drain hole cap	1	1	1	1

Note: Technical information may vary from the appliance that you have just purchased due to technical improvements. Please take care of the key, if lost, please contact the seller.

### Global Warming Potential

Model	Rated voltage (VAC)	Rated frequency (Hz)	CO <sub>2</sub> equivalent (Tonnes)
HYC-68	220-240~	50	0.0006
HYC-68A	220-240~	50	0.0006
HYC-118	220-240~	50/60	0.0008
HYC-118A	220-240~	50/60	0.0008

This product contains fluorinated greenhouse gases covered by the Kyoto Protocol. Do not vent into the atmosphere.

GWP=global warming potential

Refrigerant type	GWP
R600a	20

Name	Pharmaceutical Refrigerator	
Model	HYC-118	HYC-118A
Exterior Dimensions (W×D×H) (mm)	597×635×810	597×635×810
Interior Dimensions (W×D×H) (mm)	515×415×630	515×415×630
Effective Volume	118L	118L
Door	Solid door	Glass door with electric heat
Insulation	CFC-Free foamed-in-place urethane	
Compressor	High Quality Hermetically sealed compressor	
Shelves/Basket	3/1	3/1
Load	Max:10kg/m²	
Refrigerating Method	Force-air cooling circulation	
Exterior / Interior	sprayed steel plate /PS plate	
Condenser/Evaporimeter	Wire and tube / Wire and tube	
Temperature Control	Microprocessor controlled	
Lamp	LED 0.3W	
Net Weight	41kg	46kg
Temperature Range	2℃ ~8℃	
Voltage	220-240V ~ ; 50/60Hz	
Rated Power/Current	190W/1.4A	230W/1.5A
Refrigerant	R600a 40g	R600a 40g
Noise Level(Lp)	41dB(A)	
Foaming Agent	HFO-1233zde	
Climate Type	4	
Anti-shock Safety Classification	I	
Power connection type	Y	
Alarm	High & low temperature alarm, sensor error alarm, power failure alarm,door ajar alarm, low battery alarm	
Battery duration for alarm system	at least 8h (when the battery is fully charged)	

Note: Climate Type 4 means the temperature is +30℃ ,the relative humidity is 55%.Technical information may vary from the appliance that you have just purchased due to technical improvements.

## Safety Precautions

Dear users:

Thanks for your choice of Haier pharmaceutical refrigerator; please make sure you have carefully read and observed the contents with following signs in the manual, for better understanding of this manual and better use of this product, so as to prevent personal injuries and refrigerator damage.

### EC Declaration of Conformity

EC Declaration of Conformity

according to the low voltage Directive 2014/35/EU

For the following equipment :

Product : Pharmaceutical Refrigerator

Type Designation/Trademark: HYC-68

HYC-68A  
HYC-118  
HYC-118A

Haier

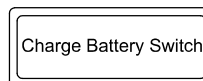
Manufactures Name : Qingdao Haier Biomedical Co., Ltd.

Manufactures Address : Haier Industrial Park, Economic Technology Development Zone. Qingdao P.R.China

Refer to in this declaration confirms with the following directive(s)/standards:

EN 61010-1;EN 61010-2-011;EN 61326-1

### Safety labels



Overcurrent  
Protector




Warning



Flammable material

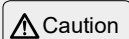
## Safety precautions



Under all conditions marked with , it is necessary to consult the document, so as to clarify the nature of potential risks and any countermeasures that must be taken.



**Warning** Ignoring this warning may result in death or serious injury
















**Caution** Ignoring this warning may result in death or serious injury, and/or damage to the freezer and property



Actions or operations which are prohibited



Actions or operations which must be followed

-  In case of flammable gas leakage such as coal gas, shut off the valve of leaked gas, open windows for ventilation and exhaust; do not plug in or pull out the power plug of refrigerator to prevent explosion and fire.
-  The refrigerator shall be installed by professional technical staffs or after-sale maintenance staffs to prevent electric shock or fire.
-  Place the refrigerator on a solid and flat ground in a stable manner. The refrigerator will be tipped over or personal injuries will be caused if the refrigerator is placed on improper ground or place.
-  Apply the dedicated power supply marked on the nameplate of refrigerator to prevent fire or electric shock.
-  If the voltage being used is 10% higher or lower than the rated voltage, an automatic voltage regulator above 1000 W and appropriate for motor load shall be installed.
-  If the power line needs to be extended, the extended line shall be no smaller than 2mm<sup>2</sup> in sectional area and no longer than 3m in length. Otherwise, fire or electric shock may be caused.
-  The power line for this refrigerator is provided with a standard three wire (grounding) plug, which complies with 10A. Do not remove or dismantle the grounding pin of power line in any case. Make sure the power plug is securely and reliably plugged into the socket to prevent fire.
-  Apply socket with ground wire to prevent electric shock. If the socket fails to be grounded, ground wires must be installed by professional technical staffs.
-  The refrigerator shall not conduct outdoor service. Electrical leakage or shock may be caused if wet by rainwater.
-  Do not place the refrigerator in humid places or places where the refrigerator may suffer splashing water, to prevent electric leakage or shock due to deterioration of insulation.
-  Do not pour water on the refrigerator to prevent electric shock or short circuit.
-  Do not place containers with water or heavy stuffs on the refrigerator. Personal injuries may be caused by falling articles and electrical leakage or shock may be caused by out flowed water due to deterioration of insulation.
-  Do not ground the refrigerator through gas pipes, water supply pipes, telephone lines or lightning conductors as electric shock or other dangers may be caused.

## Specification • Packing List

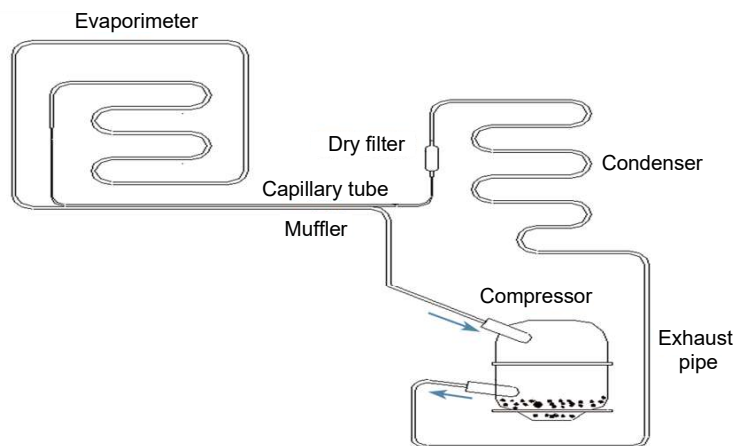
### Specification

Name	Pharmaceutical Refrigerator	
Model	HYC-68	HYC-68A
Exterior Dimensions (W×D×H) (mm)	495×580×660	495×580×660
Interior Dimensions (W×D×H) (mm)	415×385×505	415×385×505
Effective Volume	68L	68L
Door	Solid door	Glass door
Insulation	CFC-Free foamed-in-place urethane	
Compressor	High Quality Hermetically sealed compressor	
Shelves/Basket	2/1	2/1
Load	Max:10kg/m <sup>2</sup>	
Refrigerating Method	Force-air cooling circulation	
Exterior / Interior	sprayed steel plate /PS plate	
Condenser/Evaporimeter	Wire and tube / Plate type	
Temperature Control	Microprocessor controlled	
Lamp	LED 0.3W	
Net Weight	38kg	
Temperature Range	2℃ ~8℃	
Voltage	220-240V~ /50Hz	
Rated Power/Current	140W/0.85A	140W/0.85A
Refrigerant	R600a 30g	R600a 30g
Noise Level(Lp)	41dB(A)	
Foaming Agent	HFO-1233zde	
Climate Type	4	
Anti-shock Safety Classification	I	
Power connection type	Y	
Alarm	High & low temperature alarm, sensor error alarm, power failure alarm, door ajar alarm, low battery alarm	
Battery duration for alarm system	at least 8h (when the battery is fully charged)	

Note: Climate Type 4 means the temperature is +30 ℃, the relative humidity is 55%. Technical information may vary from the appliance that you have just purchased due to technical improvements.

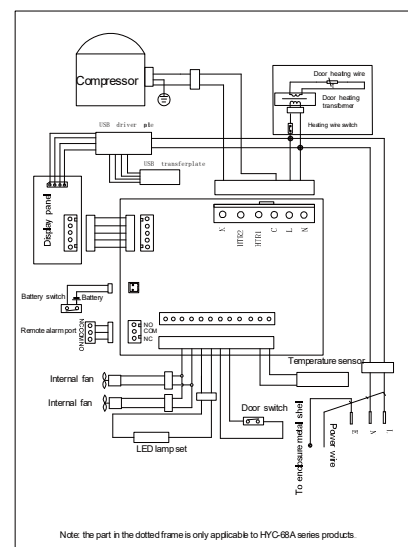
# Refrigeration Schematic • Wiring Diagram

## Refrigeration Schematic

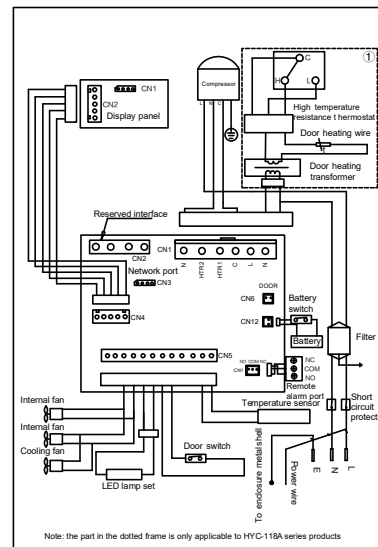


## Circuit diagram

• HYC-68/68A



• HYC-118/118A



- ⊘ Do not touch electrical parts such as power plug or switches with wet hands to prevent electric shock.
- ⚠ Hold the power plug rather than the wire when pulling the plug from the socket as electric shock or fire due to short circuit may be caused.
- ⚠ Pull out the power plug when the refrigerator is under abnormal performance as electric shock or fire may be caused.
- ⚠ Users are not allowed to dismantle, repair or retrofit the refrigerator by themselves as fire or personal injuries may be caused due to improper operation.
- ⚠ Disconnect the refrigerator when repairs or maintenance are performed on the refrigerator to prevent electric shock or personal injuries.
- ⊘ Do not inhale airborne chemicals inside and / or near the refrigerator during maintenance as health hazard may be caused.
- ⚠ The refrigerator shall be used in safe regions when toxic, harmful or radioactive articles are stored inside, as improper use may pose danger to human health or environment.
- ⚠ Pull out the power plug if the refrigerator has been out of service for long time to prevent electric shock, leakage or fire caused by aging power lines.
- ⚠ If the refrigerator is left unused in areas where supervision is unavailable for a long time, make sure children will not get close to the refrigerator and the door can not be completely closed.
- ⚠ End-of-life disposal shall be performed by competent staffs. Remove the door to prevent accidents such as suffocation.
- ⊘ Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- ⊘ Do not store corrosive articles such as acid or alkali in the refrigerator to prevent damage to internal components or electrical parts.
- ⊘ Do not place packaging plastic bags within the reach of children to prevent suffocation accidents.
- ⊘ Do not climb on or place articles on the refrigerator as personal injuries or refrigerator damage may be caused due to turnover of refrigerator.
- ⚠ Do not plug metal articles such as iron nails or wires into the holes and gaps or vents for internal air circulation, to prevent electric shock or personal injuries due to contact of articles above with moving parts.
- ⚠ Check refrigerator settings when restarting the refrigerator after power failure or the power is shut off. Changes of settings may damage the articles stored.
- ⚠ The refrigerator shall be reconnected after more than 5 minutes once it is shut off, to prevent damage to compressor or system.
- ⚠ Wear gloves when performing maintenance to prevent personal injuries due to sharp edges or corners.
- ⚠ Hold the knob when closing the door to prevent finger pinching.

- ❗ The angle of inclination shall not be greater than 45° when handling the refrigerator.
- ❗ Be careful not to be tripped up by the refrigerator during handling, to prevent refrigerator damage or personal injuries.
- ⊘ Do not lift or handle equipment with door knob to prevent refrigerator damage or personal injuries.
- ⊘ Do not damage refrigerating circuit.
- ⊘ Do not use any electrical appliances inside the appliance, unless it is approved by the manufacturer.
- ❗ The appliance must be positioned so that the plug is accessible.
- ❗ The appliance must be placed on a solid and flat surface, or excessive vibration and noise may be produced when the appliance is in operation.
- ❗ The appliance can be used by children aged from 8 years 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. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- ❗ If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- ❗ Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- ❗ If your cabinet is to be discarded, you must remove the door and leave the shelves in place. This will reduce the possibility of danger to children. And the flammable foaming needs to be disposed of by professional persons.

## Alarm

### Alarm function

The refrigerator has the alarm function in the table below:

Alarm	Code	Meaning	Alarm method
High temperature alarm	E00	The display temperature exceeds the set value for 15 minutes	Beep + alarm light flashing + Remote
Low temperature alarm	E01	The display temperature exceeds the set value for 15 minutes	Beep + alarm light flashing + Remote
Power off alarm	E02	Main power off or fault	Alarm lamp flashing + power supply lamp flashing + beep + Screen alternates temperature and code + Remote
Communication failure alarm	E03	Display board and power board can't send and receive data for 5 times in a row	Beep + alarm light flashing + code + Remote
Control sensor failure alarm	E04	Control sensor fault (open circuit or short circuit)	Alarm lamp flashing + beep + screen alternate display temperature and code + Remote
Battery failure	E05	After 5 minutes of power on, the battery voltage is less than 2.0V	The alarm light is always on, and the code will be displayed only when querying
Open door alarm	E06	The opening time is more than 2 minutes	Alarm light flashing + beep + Remote

## FAQ



Do you have questions during using? Do you doubt that the refrigerator breaks ead description here. This chapter is to give answers in respect of potential fault phenomenon as well as respective solutions.If your question is still unresolved after operation, please contact Haier after-sales service.Do not maintain and dismantle the refrigerator by yourself!

Fault	Troubleshooting
The refrigerator does not work	Whether the input power meets the requirements
	Whether the plug and socket are in loose contact
	Whether the input line and control line break down
	Whether the voltage is too low
Refrigeration effects are not apparent, temperature exceeds the standard	Whether too much or too hot articles are stored
	Whether there is certain clearance among stored articles
	Whether the refrigerator is exposed to direct sunlight or radiation of other heat sources
	Whether the door is opened too often
	Whether the ambient temperature is too high
Noise is too significant	Whether the air duct is blocked
	Whether the refrigerator is placed steadily
	Whether part of the refrigerator contact external objects or wall
	The noise noted in technical data is average data measured in standard laboratory without noise when the refrigerator with no stored articles is put on a rubber blanket and operates steadily after the door is closed, and data measured during startup & shutdown and at 1 m above the surface is not included. It is normal that actual noise differs from stated value because of loaded articles, environmental noise, no door closing, startup & shutdown of the compressor during using.
Alarm light flashes, the buzzer alarms	Whether the articles are newly put in the refrigerator and the temperature is not stabilized at 3~7℃ . The fault will be eliminated automatically after refrigeration for a while.
	Whether the door is not closed completely, which triggers alarm of door opening
	Whether the power fails, the refrigerator returns to normal condition after starting up for a while
	Whether the temperature exceeds the standard

## Usage Precautions

- Make sure the temperature inside the refrigerator has reached the set value and put articles in the refrigerator by batch. Volumes accounted by articles shall not be greater than 1/3 of refrigerator to prevent rise of temperature.
- The temperature display value of refrigerator refers to the temperature value at the temperature sensing probe inside the refrigerator. Though the temperature displayed is different from the actual one at the center of refrigerator, it will approach to the real temperature gradually.
- Clean the refrigerator with mild detergent water. Brushes, acids, gasoline, soap powders, polishing powders or hot water are prohibited to clean refrigerator as these materials may damage the painting surface and plastic & rubber components and parts. Never wipe the plastic & rubber components and parts with volatile solvent such as gasoline.
- Shut off the power if the refrigerator will be out-of-service for a long time.
- Reduce the time of keeping door open when storing or taking articles each time, to prevent great fluctuation to the temperature and humidity inside the refrigerator.
- The refrigerator will see a sharp temperature increase in a short time when the door is opened, which is normal, and the temperature will resume 1h after the door is closed.
- The refrigerator shall operate with ambient temperature as 16-32℃ ; if the humidity is higher than 70%, condensation will occur on the glass door (HYC-68A) in high temperature and high humidity condition, which is normal and will not affect the storage temperature inside the refrigerator; in the event of condensation, please improve ventilation conditions as soon as possible and reduce ambient temperature simultaneously.
- Please keep the article inside at least 20mm away from the cabinet back wall!
- The maintenance should be supplied by professional after-sales service people once the equipment is faulty.



Meaning of crossed –out wheeled dustbin:

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact you local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

## Product Features

The product is applicable to pharmacies, pharmaceutical factories, quarantine stations, health centers and hospitals, used to store biological products and those need to be stored at a temperature between 2-8℃ .

### 1.Temperature Control

Microprocessor control, digital display of temperature, temperature display range as 2℃ -8℃ .

### 2. Safety System

- Multi-fault alarm (high and low temperature alarm, power failure alarm, sensor error alarm and door ajar alarm,low battery alarm)
- Three alarm methods (audible buzzer,visual and remote alarm )
- All independent components are safely grounded

### 3.Refrigeration System

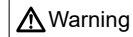
- Optimized refrigeration system, hermetically sealed refrigeration compressor
- Automatic defrost maintains optimum cooling capacity

### 4.User-friendly Design

- User-friendly design, Microprocessor control, smart and carefree, adjustment not required
- High-performance thermal insulation layer, with excellent insulation effect
- Automatic condensate removal, no drain lines required

**Note: Technical information might be somewhat different on your refrigerator than published due to continuous improvement.**

## Cleaning and Maintenance



Warning

- To avoid electric shock or staff injuries, please switch off power of the refrigerator before conducting any repairment or maintenance.
- Do not inhale any air borne particles when conducting maintenance on your refrigerator.

### Refrigerator cleaning

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- 1.Clean the refrigerator once a month. Regular cleaning keeps appearance of the refrigerator new.
- 2.Wipe off any dirt with a cleaning cloth with mild detergent water.
- 3.Do not dump water on enclosure or inner chamber of the refrigerator, otherwise electrical apparatus insulation may be damaged, causing occurrence of faults.
- 4.The compressor and other mechanical parts are completely sealed. No lubrication is required.

### Lamp replacement

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The refrigerator is equipped with a LED lamp. The lamp has low energy consumption and long service life. Any doubt, please contact the after-sales service personnel for changing it.

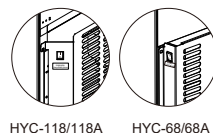


## Power failure alarm function

When the power is down, power-off alarm function is activated, buzzer with 1 Hz frequency continuously beeps, at the same time alarm indicator light of the board flashes, if alarm equipment is connected to the remote alarm port, it will alarm synchronously and last at least 8 hours. Press the "Alarm" button to cancel the power off alarm, while the remote alarm function is cancelled.

## Battery Switch

1. Battery switch is installed on the back of the products, with "Charge Battery Switch" label;
2. Battery switch "ON" indicates that battery is on ;  
"OFF" indicates that battery is off.



## USB(Optional)

The USB module queries the display board for data every 20 seconds and records it every 6 minutes. After inserting the U disk, the temperature data (csv format, open with Excel) can be exported to the U disk by year and month. After the data storage is full, the latest stored data will automatically replace the oldest stored data.

### • Export data

Plug in the USB flash drive, automatically identify and start importing data to the USB flash drive. During data transmission, press the "-" button, the display panel flashes "USB", indicating that the data export is in progress, and it is prohibited to pull out the USB flash drive. Exit after 5 seconds and display the actual temperature in the box. If the display panel displays "ALL" steadily, it means that the data export is complete. After 5 seconds, it exits and displays the actual temperature in the box. You can remove the U disk from the USB interface. If after pressing the "-" key, the display does not change and still shows the actual temperature in the box, indicating that the U disk has not been recognized, please try again later, the recognition process can take up to 1 minute. The format of the exported data is as follows:

Date.	Time.	Inner.Temp.	Setting.Temp.
20191108.	.....11:21.....	.....4.1.....	.....4
20191108.	.....11:27.....	.....4.1.....	.....4
20191108.	.....11:33.....	.....4.1.....	.....4
20191108.	.....11:39.....	.....4.0.....	.....4

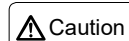
### • USB module time setting (system current time setting)

Long press the "-" button for 10 seconds, the display area will display "1P" steadily, press the "+" or "-" button to switch to 2P (month), 3P (day), 4P (hour), 5P (minute), 6P (seconds). To set the year, press the "Set" button on the 1P interface, and the year will flash in the display area. Press the "-" button or the "+" button to select the year, and display it in a loop from 15 to 99. If you set 2019, select 19, Press the "set" button to save and confirm and automatically return to 1P. Press the "Alarm" key or no operation for 10 seconds, and return to the temperature display in the box. In the same way, you can set month, day, hour, minute, and second.

# Product Installation

## Installation environment

- Ambient temperature: 16 °C to 32 °C , 18 °C to 25 °C are optimal and air conditioning system is required as necessary.
- Ambient humidity: HYC-68A:below 70%Rh;HYC-68:below 75%Rh;HYC-118/118A:below 85%Rh.
- Avoid excessive dust.
- Avoid mechanical swing or vibration.
- The refrigerator shall operate at an altitude lower than 2000m.
- Input voltage: no greater than  $\pm 10\%$  of rated voltage.



Caution

- Normal operation will be impossible for refrigerator if it is installed in environments other than those described above as it is sensitive to ambient temperature. Start operation after the environment is improved.
- It is prohibited to install the refrigerator outdoor. Electric leakage or shock may be caused if the refrigerator gets wet by rainwater.

## Installation Site

The installation site shall meet following requirements for normal operation and best performance of refrigerator:

- Do not install the refrigerator in a narrow and confined space and the door of the installation space may not be smaller or lower than the refrigerator, to ensure smooth entry and exit of the refrigerator as well as to prevent damage to the stored articles due to not timely repair of refrigerator as the installation site is not easy to be accessed.
- The ground at the installation site shall be solid and flat.
- It is well ventilated and free from direct sunshine.
- Do not share the same power outlet with other equipment. The power plug must be plugged into the outlet securely.
- Do not twist or compress the power line.
- If the power line needs to be extended, the extended line shall be no smaller than 2mm<sup>2</sup> in sectional area and no longer than 3m.
- Check the operating voltage before operation and voltage regulator appropriate for motor load may be applied in regions with unstable voltage. Ensure the normal input voltage stands at rated voltage  $\pm 10\%$  and the power of voltage regulator is greater than 400W.
- The refrigerator shall be grounded in a reliable manner.
- If the socket is provided with grounding wire, check if it is well grounded before operation.
- If the socket is not provided with grounding wire, a new one shall be installed by professional engineers.

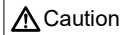


Warning

- Do not ground the refrigerator through gas pipes, water supply pipes, telephone. lines or lightning conductors as electric shock may be caused.
- The power plug should be accessed after installation to ensure the power line can be pulled immediately in case of an emergency. The air vents should be free from any obstruction.

## Preparation before use

1. Remove the packaging materials and strings  
Remove all packaging materials and strings for transport.



- The maximum tilt angle of the refrigerator shall be no more than 45° during the course of movement.
- Transportation and relocation requirement: clamp truck or forklift truck.

2. Count refrigerator accessories accompanied

Check the articles inside the refrigerator against the packing list; if any difference, contact the after-sale service.

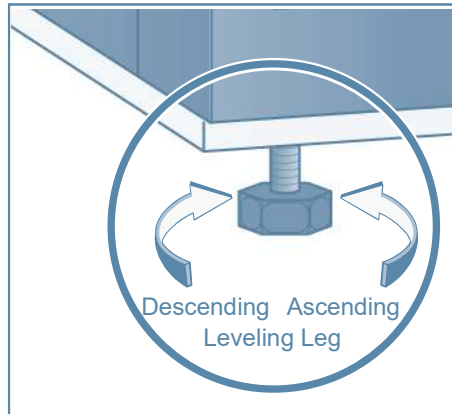


3. Placing conditions

Choose the appropriate distance according to the space requirement.

4. Adjust the leveling leg

Rotate the leveling legs with a wrench in clockwise to extend them out and secure them onto the ground. This is to make sure the refrigerator does not move during operation.



5. Standing

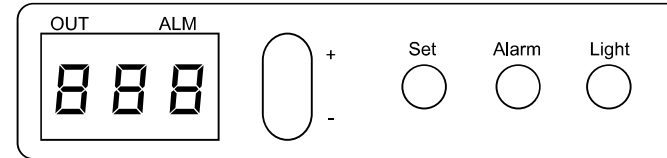
Do not switch on the power after the refrigerator is placed, leveled and cleaned. Switch on the power after it is put on standing for more than 24h, to ensure normal performance of refrigerator.

## Application method

### Microprocessor temperature controller

Adjust the cabinet temperature easily by the microprocessor temperature controller in front panel installed on the refrigerator. Don't do any adjustment at least 30 mins when you firstly power the refrigerator.

Schematic diagram of controller:



1. Temperature adjustment

Factory pre-set to 5°C .

Set inner temperature: Press "Set" button for 5 seconds, LED displays "TS". Press "Set" again, the current set temperature value flashes. Make adjustment to specified value through Up Key "+" and Down Key "-". Press "Set" to save and return.

The set temperature will be reached after running for a period of time.

2. Error display

When there is error of sensor, the LED displays "EE" and alarms. The refrigerator would still cool in error safety mode in a short period of time. Please move the stored things to other proper refrigerator ASAP to avoid loss. Then call for service.

3. High/low temperature alarm

When the inner temperature exceeds the range of high and low alarm temperature limits, alarm light flashed and buzzer sounds. Press "Alarm" button to silent the alarm but the alarm light keeps flashing until inner chamber temperature within alarm limits.

4. Check recent highest and lowest inner temperature

Press both "Alarm" and "+" buttons to check the recent highest inner temperature. Release the buttons to return to the inner cabinet temperature display.

Press both "Set" and "-" buttons to check the recent lowest inner temperature. Release the buttons to return to the inner cabinet temperature display.

5. Set values of high temperature alarm "ALH" and low temperature alarm "ALL"

Press "Set" button for 5 seconds. LED displays "TS". Press "+" button to show "ALH". Press "Set" again, the current high alarm temperature value flashes. Make adjustment to specified value through Up Key "+" and Down Key "-". Press "Alarm" to return.

Press "+" button or "-" to show "ALL". Set low temperature alarm value in the same way.

### Inner light

In order to see the stored goods clearly, a LED light has been installed in the cabinet. You can control light "on" or "off" by "Light" button to save energy, please turn off the light after observing the stored goods in the refrigerator (only for HYC-68A/118A).

The light is on when the door is open; The light is off when the door is closed (only for HYC-68/118).

• HYC-68A



• HYC-118A



## Initial Power-on

Observe the rules below for initial start-up and continuous operation:

When the refrigerator is empty, connect the power line to the appropriate dedicated socket and make sure the power is rated voltage and frequency.



The refrigerator has been preset to operate at 2-8°C in the factory and it is not required to set temperature.



Before products go out of the factory, the battery switch is off, the users must open it before using at the first time. Once the power failure occurs, the product can realize the function of power failure alarm.



After the power is on, the audible alarm will alarming and this is normal . Press the "Alarm" in the control panel to stop alarming. The audible alarm continues to operate until the temperature of sensor reaches 5°C ±3°C .



The temperature of refrigerator will stay at the preset temperature in a stable manner after hours of operation.



After operation status of refrigerator is checked thoroughly, put articles into the refrigerator.

- This unit should be managed by a dedicated person. Inspection should be performed daily to keep appropriate records. When the temperature is out of specification, action should be taken to move the products to a safe place.
  - This product is pharmaceutical refrigerator with temperature ranging from 2-8°C inside. Please make sure articles to be stored conform to environment inside to avoid damages of articles and economic loss.
  - Because of refrigeration inertia, display temperature of the product may differ from actual temperature and humidity inside, which is normal.
- All refrigerators are refrigerator equipments. Relatively too hot articles must not be put in the refrigerator by one time. Otherwise the compressor will not stop for a long time, no temperature fall may be apt to burn the compressor. Therefore, articles shall be put in batches and cooling shall be conducted in batch until required temperature is reached!
  - Do not damage refrigerating circuit.
  - Do not use electrical apparatus without production permit in the refrigerator.

## Operation after outage

The refrigerator is capable of memorizing set value. When power restores after outage, the refrigerator will continue operating according to set parameter before last outage.

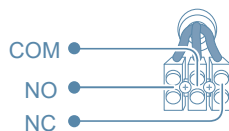
### Warning

- The refrigerator shall be reconnected after more than 5 minutes once it is shut off, to prevent damage to compressor or system.
- Pull out the power plug if the refrigerator has been out of service for long time to prevent electric shock, leakage or fire caused by aging power lines.
- If the refrigerator is left unused in areas where supervision is unavailable for a long time, make sure children will not get close to the refrigerator and the door can not be completely closed.

## Remote Alarm Terminal

1. Remote alarm terminal is installed on the refrigerator and the alarm signal behind the compartment is output by the terminals. The bearing capacity of the terminals is DC 30V, 2A.

2. Terminal output: Remote alarm terminals include NO, NC and COM. The user can choose "NO" or "NC" if needed.



## Component Names

