



# PHARMACOLD



# MDF Classic Series

## PHARMACY FREEZER

**Operating Guidelines for the Pharmacold MDF-20U110**

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Thank you for choosing the Pharmacold MDF Classic Series Pharmacy Freezer. Please read and follow the operating guidelines within this instructional manual to ensure your safety and optimal equipment performance.

Failure to do so may result in damage to the unit, injury to the operator personnel, equipment under performance, or equipment failure.

Your Pharmacold product has been preprogrammed with a -25 degree Celsius set point, a low temperature alarm of -15 degrees Celsius, and a high temperature alarm of -30 degrees Celsius. If different settings are required please refer to this manual

## **PLEASE BE AWARE OF THE FOLLOWING REQUIREMENTS AND GUIDELINES**

- All Internal adjustments and maintenance of any Pharmacold product must be performed by qualified and licensed service personnel
- Please ensure all personnel operating this equipment receive and follow instructions on how to safely use the equipment and understand the hazards and risks involved
- Always use proper protective equipment when handling extreme temperature items
- Always follow proper hygiene practices before and after handling pharmacological items
- If the user's manual is lost or damaged, please download a copy from this units product page at [www.360medical.ca](http://www.360medical.ca) or E-mail to [info@360medical.ca](mailto:info@360medical.ca)

## **THROUGHOUT THIS MANUAL YOU WILL ENCOUNTER THE FOLLOWING SYMBOLS. PLEASE FOLLOW THEIR WARNINGS AND GUIDELINES**



Important operating and / or maintenance guidelines. Please read and follow them carefully.



There are potential electrical hazards. Only qualified personnel should perform these procedures.



Hot Surface(s) may cause burns to unprotected skin, or damage to objects if they come into contact with them.



Extreme temperature hazard, hot or cold. Use special handling gear and / or equipment.



Do not throw electronics in domestic waste. Please recycle discarded electrical equipment properly. Help us protect the environment by bringing discarded appliances and electronics waste to recycling centres.

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# INSTALLATION

## Safety Information

All electrical work must be performed by licensed or qualified service technicians. Safety precautions must always be taken when using any electrical appliance.

- Do not use this appliance for other than its intended use. This product is intended for use as a purpose built Medical Freezer.
- Do not cover the front grille by placing objects up against the cabinet.
- Ensure adequate ventilation.
- Do not touch any moving parts or hot surfaces.
- Regulations require that all electrical work be carried out by authorized and licensed service technicians. For your own safety and that of others please ensure this is done.
- Do not overload the power supply. Always refer to the rating label.
- Never use extension cords or multiple adaptors (power bars).
- If the main supply cord is damaged, it must be replaced by the manufacturer, its service agent or a qualified technician.
- Disconnect the main power supply before attempting any cleaning, removal of any covers, or maintenance work.
- Do not store explosive substances, such as aerosol cans with flammable propellant.
- Warning: Do not use mechanical devices or other means to accelerate the defrosting process. Defrosting is performed automatically.
- Warning: Do not damage the refrigeration circuit.
- Warning: Do not use electrical appliances inside the storage compartment of this appliance

## Assembly

- Remove the appliance from the packaging and peel off any protective film from all surfaces.
- Fit the shelf support clips onto the shelf support strips, making sure that the clips for each shelf are of the same height and that they are securely engaged on the support strip.
- Unwrap each shelf carefully to prevent damaging their protective coating or surface finish.
- Position the shelves onto the clips.



Please dispose of all waste packaging appropriately and in accordance with all local recycling laws.



### WARNING

Do not overload the power supply. Always ensure that the power supply is adequate for the electrical requirements specified on the rating label and never use extension leads or multiple adaptors.

\*If you have any questions during assembly please call our service line 1-800-209-2082 ext. 3

## Positioning the Medical Freezer

- Please position the cabinet carefully and ensure the unit is not tipped more than 45 degrees or bumped against anything.
- The power supply cord for the Medical Refrigerator is located at the bottom left hand side (as viewed from the front).
- The maximum recommended ambient temperature range for this Medical Freezer is set to. 10 to 25 °C.
- Avoid positioning the appliance in direct sunlight or damp areas.
- Allow adequate space for the door to fully open.
- Ensure that this Medical Freezer is positioned on a level surface, so as to allow the door to shut and seal correctly, as well as to allow proper drainage from the evaporator tray to prevent any water overflow. If necessary, adjust the screw feet of the appliance to make it level.

**Note: If the unit has not been stored or moved in an upright position, let it stand upright for a minimum of 12 hours before operation.**

## Ventilation

- All models must have clear and unobstructed ventilation from the entire front grille.
- **WARNING:** Failure to provide the minimum ventilation space will harm the performance of your Medical Freezer could be damaged or cause fire hazard and will void any warranty.
- **WARNING:** Keep the front grille clear of obstruction.

## Power Supply

This Medical Freezer uses a three-pin plug which must be well grounded. Never ground the Medical Freezer through a gas pipe, water pipe OR the ground wire of single-phase power supply etc.

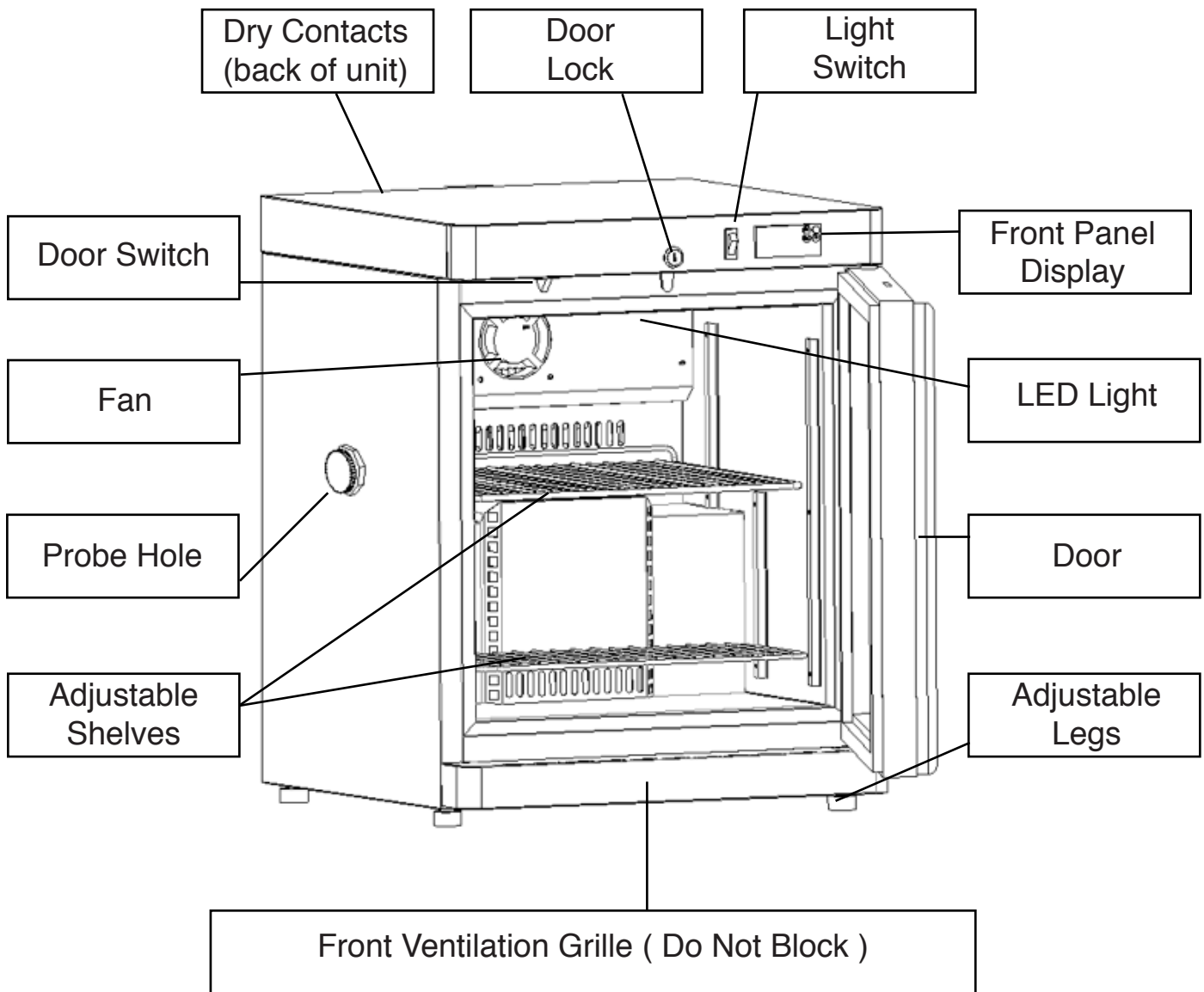
Never share the same circuit with other appliances. Before plugging in your Medical Freezer for the first time make sure the power cable is free from damage and check that your voltage corresponds to that on the rating plate located on the back of the freezer.

Once plugged in the display will show the temperature inside the Medical Freezer and the compressor will run (the indicator light of cooling will be on at the same time ). This temperature is the actual temperature recorded by the sensors inside the Medical Freezer and as the freezer cools to the set point (factory set at -25°C) the number on the display will descend accordingly.

If power is cut off, wait for at least 5 minutes before plugging the unit in again to avoid damaging the compressor.



# PRODUCT DESCRIPTION: MDF-20U110



# TEMPERATURE

## Description

The Digital display controller is used to set and control temperature settings and alarms. It will also display the current internal temperature of the freezer. We also recommend using a Pharmacold Traceable Min/Max Glycol Thermometer to have a reference point as well a backup alarm in case of any power failures.








## Controller Symbols

### Key Combination

 +  To lock or unlock the keyboard

**SET** +  To enter in programming mode

**SET** +  To return to room temperature display

LED	MODE	MEANING
	ON	Compressor enabled
	Flashing	Anti short cycle delay enabled (AC parameter)
	ON	Defrost in progress
	Flashing	Dripping in progress
	ON	Fans output enabled
	Flashing	Fans delay after defrost
	ON	Measurement unit
	Flashing	Programming mode
	ON	Measurement unit
	Flashing	Programming mode

## FUNCTIONS AND PARAMETERS

### How to see the set point:

1. Push and immediately release the SET key, the set point will be shown.

### How to change the set point:

1. Push the SET key for 3s to change the set point value;
2. The value of the set point will be displayed and the °C or °F LED starts blinking;
3. To change the set values push the up or down arrows.
4. To save the new set point value push the SET key again or wait 10s.

### How to start the a manual defrost

Push the DEF  book for 3s and a manual defrost will start.

### Advanced Parameters

1. Enter the Programming mode by pressing the SET + down arrow keys for 3s. (°C or °F LED starts blinking).
2. Release the keys, then push again the SET + down arrow keys for more than 7s. The L2 label will be displayed immediately followed from the Hy parameter. (NOW YOU ARE IN THE PROGRAMMING MODE)
3. Select the required parameter.
4. Press the SET key to display its value
5. Use up and down arrows or SET to change its value.
6. Press SET to store the new value and move to the following parameter.

### To Exit:

Press SET + up arrows or wait 15s without pressing a key.

### Parameters - How to change a parameter value

1. Enter the programming mode by pressing the SET + down arrow keys for 3s. (°C or °F LED starts blinking)
2. Use the up and down keys to select the required parameter. Press the SET key to display its value.
3. Use up arrow or down arrow to change its value.
4. Press SET + up arrow to store the new value and move to the following parameter using the up and down arrows.

### Defrost

This equipment has a manual defrost function

### Remote Alarm

The unit has a built in high and low temperature alarm.





## Operation

This product is designed to operate at a recommended ambient temperature between 10°C to 25°C.

## Setting Temperature

- Press down to decrease the set temperature.
- Press up to increase the set temperature

## Turn on/off the light

- The interior light is controlled by the light switch beside the controller on the front face of the unit. This light is not automatic.

# CLEANING AND GENERAL MAINTENANCE

All cleaning and maintenance on medical freezers should be done by qualified and/or licensed service technicians.

- **WARNING:** You must disconnect the plug before cleaning or maintenance.
- Do not use abrasive cleaning agents which may scratch and harm the delicate interior finishes of your appliance.
- Always wipe dry after cleaning.
- An agent or qualified technician must carry out repair if required.
- The unit must be kept clean and free of dust at all times. It is recommended that the cleaning routine be conducted at an interval appropriate to the speed of accretion of dust on the unit and in any event at least every month. Failure to keep the unit clean will damage the refrigeration system and invalidate the warranty. Use a vacuum cleaner, preferably with a brush attachment, to remove built up dust.

## Cleaning the condenser

The condenser must be kept clean and free of dust at all times. It is recommended that the cleaning routine be conducted at an interval appropriate to the speed of accretion of dust on the condenser.

Failure to keep the condenser clean will damage the refrigeration system and invalidate the warranty.

**WARNING:** The condenser is a delicate component and is easily damaged. Never use a stiff brush or sharp objects to clean it. Never use water. This unit should only be cleaned by qualified and/ licensed service technicians.

## TROUBLESHOOTING

If this freezer develops a fault, please check the following table before making a call to the service line.

<b>Fault</b>	<b>Possible Cause</b>	<b>Action</b>
The appliance is not working	The unit is plugged in correctly	Check the unit is plugged in correctly
	Plug or lead is damaged	Call our agent or an approved qualified technician.
	Power supply	Check power supply
	Internal wiring fault	Call our agent or an approved qualified technician.
The appliance turns on, but the temperature is too high or too low	Filter or condenser blocked with dust	Clean filter or condenser
	Doors are not shut properly	Confirm doors and/or seal is not damaged.
	Appliance is located near a heat source or air flow to the condenser is being interrupted	Move the appliance to a more suitable location
	Ambient temperature is too high	Increase ventilation or decrease if needed. Or move unit to a cooler location.
	Insufficient airflow to the fans	Remove any blockages to the fans
	Appliance is overloaded	Reduce the amount stored in the appliance
	Factory default parameters adjusted	Call our agent or an approved qualified technician.
The LED lights not working	Led light short Leaded damage	Call our agent or an approved qualified technician.
The appliance is unusually loud	The appliance is touching a neighboring object	Check installation position and change if necessary
	The appliance has not been installed in a level or stable position	Check installation position and change if necessary



## **GUIDELINES FOR DISPOSAL**

**DO NOT** dispose of this product into municipal waste. Electrical appliances disposed in landfills or dumps will leak hazardous material into the ground water, damaging the environment.

Contact your local municipal government for more information on how and where to dispose of this type of electrical unit.

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## **WARRANTY**

This product comes with a 1 year parts, 1 year labour and 5 year compressor part warranty from purchase date.

**FOR SERVICE AND WARRANTY INFORMATION  
PLEASE CONTACT 360 MEDICAL INC.**

1-800-209-2082 ext 3

Or

Info@360medical.ca

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## **Also Available From Pharmacold**

Temperature Data-loggers  
Glycol Traceable Min/Max Thermometers  
Iced Lined Refrigerators  
Portable Refrigerated Coolers  
Vaccine Transport Coolers  
Vaccine Refrigerators  
-20 Degree Celsius Medical Freezers  
-60 Degree Celsius Medical Freezers  
-80 Degree Celsius Medical Freezers





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