

Pharmacy Refrigerator Operating Instructions

Operating instructions for your
LABCOLD PHARMACY REFRIGERATOR
(RLDF/G models 0110, 0210, 0510, 1010, 1510)

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WEEE: Disposal at end of life.

This equipment, when being disposed of in an EU Member State, is subject to the Waste Electrical and Electronic Equipment Regulations (WEEE) and must be recycled and disposed of in accordance with EU directive 2002/96/EC as applied in local laws of that State at the time of disposal. As this item is designed for medical or scientific use, before presenting for collection and disposal it will be necessary for the user to provide documentary evidence of decontamination and/or that it is entirely safe to handle and dismantle outside of a controlled environment. Goods that cannot be so certified fall outside the scope of the Directive and remain the user's responsibility to dispose of.

Labcold recognises the benefit to the environment of this legislation and is designing products to allow more recycling and less impact on landfill. Please contact your vendor or local Labcold distributor for further advice on disposal of this product at the end of its useful life.

IMPORTANT: These operating instructions contain information essential to the safe and reliable operation of your refrigerator. Failure to use your refrigerator in accordance with these instructions may invalidate your warranty.

PLEASE RETAIN AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE

1

Before Use

Thank you for purchasing a **Labcold** Pharmacy Refrigerator. Your fridge has been purposely designed and precision built for the safe storage of vaccines and other temperature sensitive pharmaceuticals.

Although great care has been taken in the manufacture of your refrigerator, damage can occur in transit. **Before** using for the first time please remove all packaging and give your fridge a thorough visual inspection. If any damage is suspected, please contact your retailer immediately upon receipt of the product. **Failure to do so may invalidate your warranty.**

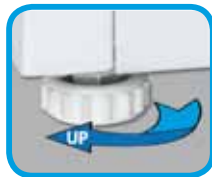
Setting Up

Place your fridge in the location in which it is to be used.

i Do not place your fridge near a direct heat source or direct sunlight and leave at least 6cm all round the unit for adequate ventilation (wall mounted models do not need extra space at the back because the cooling system is in the sides). **Failure to do so may effect the performance of your refrigerator.**

Clean your fridge with mild soapy water to remove any dust that may have accumulated during manufacture and dry thoroughly.

Ensure your fridge is level by adjusting the feet at the bottom of your fridge.



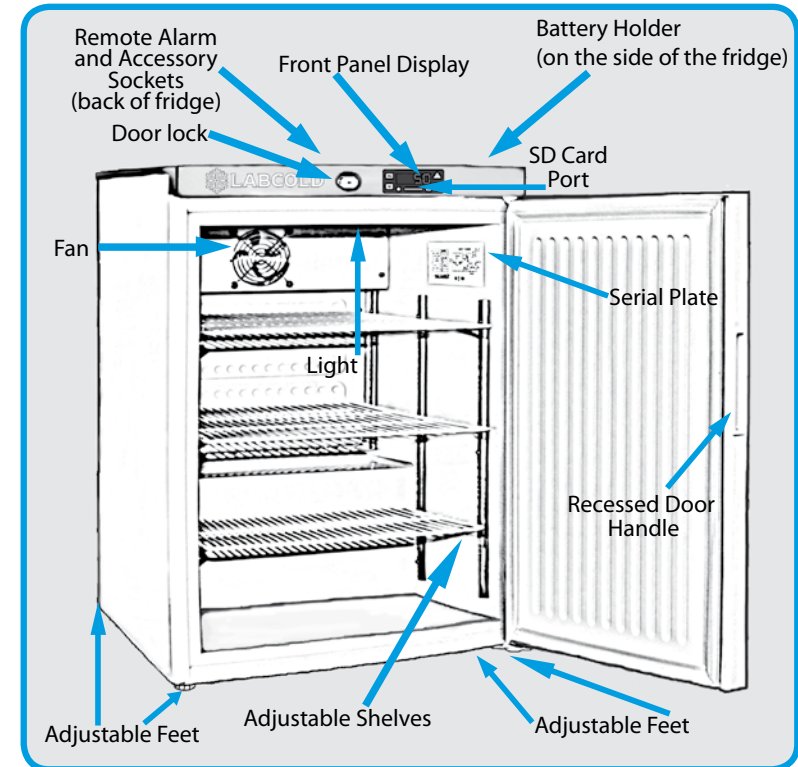
Insert shelves by placing clips in the racking and resting the shelf on top. When positioning the shelves, please remember to keep adequate room for air circulation. **Failure to do so may cause hot spots in the fridge.**



YOUR REFRIGERATOR SHOULD NOW BE LEFT FOR AT LEAST TWO HOURS BEFORE CONNECTING TO POWER FOR THE FIRST TIME

2

A Closer Look



Alarm Battery Back Up



Insert 4 AA long life alkaline batteries (not supplied) in the holder located on the right side of the unit

i Batteries will **only** power the controller not the fridge.

Remote Alarm and Labcold accessories sockets



Remote alarm and **Labcold** accessory sockets are located at the back of the fridge. If you have a **Labcold** external alarm kit this can be connected to the 2 pin connector on the left. The 4 pin connector socket is for the **Labcold** accessory kit.

The maximum rating for the connection is 1A 30Vdc. DO NOT CONNECT TO MAINS VOLTAGE

3

Plug in & switch on

Before plugging in your **Labcold** refrigerator for the first time make sure the power cable is free from damage and check that your voltage corresponds to that on the serial plate.

It is recommended that you do not use extension cords or multiple socket adapters. Make sure the power cable is not bent, pinched or compressed and that it can be easily accessed.

Once plugged in, the word **Labcold** will scroll across the display followed by a two digit number. Alarms will then show on the display and you may hear the audible alarm as the fridge completes its start up diagnostic checks. This is because the controller is factory set to alarm when it senses the temperature inside the refrigerator is above 8°C or below 2°C. The refrigerator is now working and the sensors are detecting the ambient temperature. Once the fridge has cooled sufficiently it will cease to alarm. You can press the 'alarm mute' button (see figure 1 below) to cancel the alarms.

The display will then show the temperature inside the fridge correct to one decimal place. This temperature is the actual temperature recorded by the probes inside the refrigerator and as the fridge cools to the set point (factory set at 5°C) so the number on the display will descend accordingly.



Figure 1 - Alarm mute button



Figure 2 - Alarm mute display

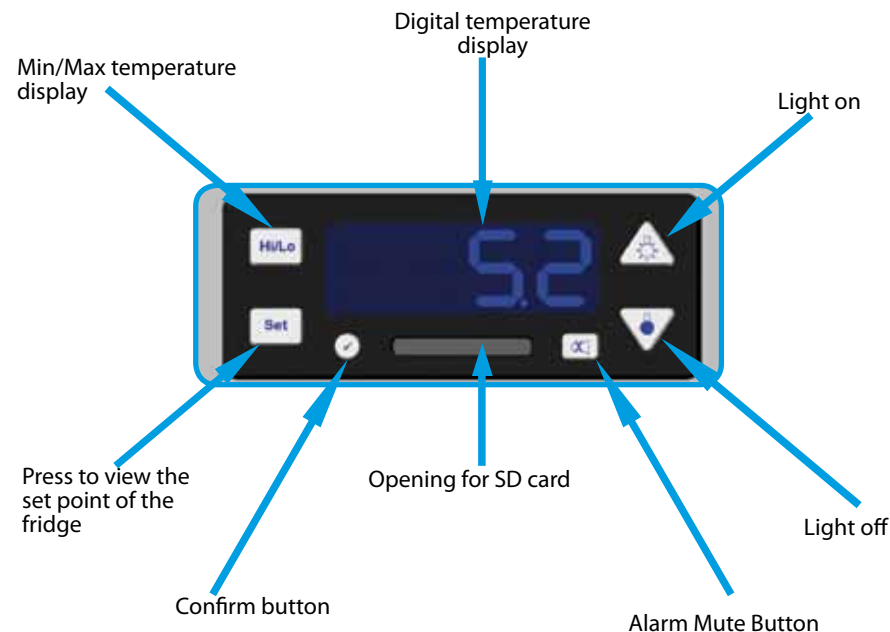
ALTHOUGH THE REFRIGERATOR WILL REACH 5°C AFTER AN HOUR (APPROX) YOU SHOULD LEAVE THE FRIDGE RUNNING FOR 24 HOURS BEFORE FILLING WITH TEMPERATURE SENSITIVE VACCINES AND PHARMACEUTICALS.

i It is important that you reset the maximum/minimum temperature record after you have loaded the refrigerator for the first time (please see page 8). This will ensure that your daily temperature record is accurate when you start to use the fridge for storing medicines.

4

Front Panel Display

The display on the front of the refrigerator is designed to constantly show the temperature inside the fridge correct to one decimal place.



High/Low Temperature Alarm

If the temperature in your refrigerator rises above 8°C an alarm will sound and the front panel will flash **Hi** and the current temperature inside the fridge. This information will display alternately.

The cause of the rise in temperature should be investigated **immediately**. Usually, it is simply because the door has been open for a long time or the fridge has been restocked, however, it is recommended that you check the fridge to make sure that the temperature is returning to normal after the alarm has been activated.



5

If the temperature in your refrigerator drops below 2°C an alarm will sound and the front panel will flash **Lo** and the chamber temperature will be displayed alternately. There could be a number of reasons for this, such as extremely cold items being placed in the fridge.

The cause of the drop in temperature should be investigated **immediately** and the refrigerator should be monitored to check that it is returning to the correct temperature.



Door Alarm

If the door of the fridge is left open for more than 90 seconds an audible alarm will sound and the front panel will flash **door** and display the temperature inside the chamber alternately. If you want to silence the alarm if, for example, you are stocking the fridge, simply press the 'alarm mute' button under the temperature display (see page 3).



If the door has been left open for a prolonged period of time you may also experience a **Hi** alarm. This is because warm air from the room will have entered the fridge while the door was open. It is recommended that you close the door and check that the temperature on the display decreases until it settles around the set point.

**IF THE ALARM IS MUTED IT IS TURNED OFF
THE REFRIGERATOR WILL NOT ALARM AGAIN FOR THE SAME INCIDENT**

6

Internal Light

Your refrigerator is fitted with an energy saving LED light which is factory set to go on when the door is opened and go out when the door is shut.

If you want to turn the light on temporarily you can press the 'light on' button and press the 'light off' button to turn it off again. The next time the door is opened, the light will return to automatic mode.



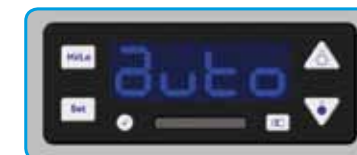
If you want the light to stay on all the time, press and hold the 'light on' button until the display shows **L on**. The light will now remain on irrespective of whether the door is closed or open.



If you want the light to remain off at all times, press and hold the 'light off' button until the display shows **L off**. The light will now remain off irrespective of whether the door is closed or open.



To return the light to automatic mode, simply press and hold both the 'light on' and 'light off' buttons until **auto** is shown on the display.



SD Card

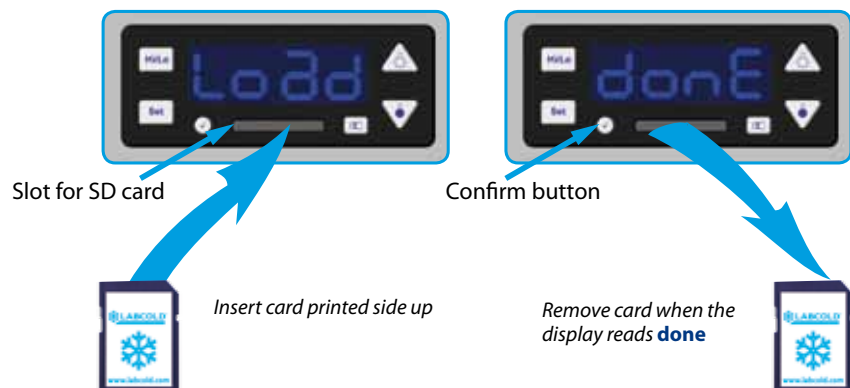
When you register the warranty of your **Labcold** refrigerator (UK customers only, available for purchase elsewhere), you will be sent an SD card. Although it looks like a card you may have in your camera, this SD card will only work with your **Labcold** fridge and using it for any other purpose may render it unable to perform the data logging function.



Only Labcold SD cards will work with Labcold Fridges

Your **Labcold** refrigerator automatically records performance information such as door openings, temperatures etc. The SD card allows you to extract this information and store it on your computer and/or print hard copy. The information stored in the controller will cover the last 13 months and is not deleted from the fridges memory when uploaded. It is recommended that you do this on an annual basis (at least) and use a separate SD card. New cards are available at a small cost from **Labcold**. Please e-mail sales@labcold.com.

Using the Labcold SD card



When you insert your **Labcold** SD card in to the slot in the front of the controller the display will show **load**. Pressing the confirm button will upload all data stored for up to 13 months to the card. When this process has been completed the display will show **done** and the card can be removed. The card can then be inserted in an SD reader, connected to any PC or Mac and will download the data as a CSV file, a format compatible with Microsoft® Excel or other spreadsheet applications. Full instructions will be sent with the card.

Min/Max Temperature Recording

The DH Green Book Chapter 3 recommends that: 'temperatures in the refrigerator must be monitored and recorded at least once each working day, and documented on a chart for recording temperatures.'

Your **Labcold** pharmacy refrigerator records the maximum high and minimum low temperatures when connected to mains electricity (if batteries are fitted, it will record when not connected). This information is stored until the fridge is reset.

This information can be accessed if you press the 'Hi/Lo' button and release. The display will show **Hi** and then the highest temperature recorded since the last reset, then **Lo** and display the lowest temperature.



Min/Max Temperature Reset

Once you have taken the temperatures for the day it is important that you reset the fridge. This is because the refrigerator will always display the high and low temperature since the last temperature reset. The refrigerator does not automatically reset.

To reset the minimum/maximum temperature press the 'Hi/Lo' button and hold. An alarm will sound and the current high and low temperatures will be displayed as above. Keeping your finger on the button, the display will then change to flash **Hi Lo** then revert to normal operation. This means you have successfully reset the minimum/maximum temperature display and the previous high and low temperatures have been deleted.



Caring For Your Fridge

As with all refrigerators, your **Labcold** pharmacy and vaccine fridge, although designed to provide you with many years of fault free service, will perform better if attention is paid to the loading of the fridge and it is regularly cleaned and defrosted.

Loading

In order to ensure even temperature distribution throughout your refrigerator it is important that :

- The fridge is not overloaded. It is recommended the fridge is only partially filled (around 50%) and even at maximum stock level the content should not exceed two thirds (66%) of the fridges capacity.
- The contents are not packed too closely together.
- The contents do not touch the wall or the bottom of the fridge and are stored away from the fan.
- When loading new stock in to the fridge, ensure product with the earliest expiry date are at the front and used first.
- After restocking the fridge, check the temperature 10 minutes later to ensure that the fridge is cooling down, running satisfactorily and is not overstocked.

Cleaning

It is recommended that your fridge is cleaned on a regular basis

ⓘ It is essential that you unplug the refrigerator from the mains and transfer the contents where they can be stored and monitored at the correct temperatures before cleaning

When cleaning you should:

- Remove the shelves and clean with weak soapy water. **Do not use strong detergents or bleach**
- Wipe the inside of the fridge in the same solution and dry with a soft cloth. **Take care to avoid the light fitting and ensure that the drain hole at the back of the fridge is clear of debris**
- Wipe the door seal with a damp cloth. **Do not use strong detergents or bleach**
- Gently remove the dust on the back of the fridge. **Take care not to damage the pipes**

Defrosting

Although your **Labcold** fridge features automatic off-cycle defrosting, it is recommended that it is defrosted manually if there is a build up of ice. This can happen in times of high humidity, if the door has been opened for a long time, it is overstocked or the ambient temperature is high.

ⓘ It is essential that you unplug the refrigerator from the mains and transfer the contents where they can be stored and monitored at the correct temperatures before defrosting

To defrost you should:

- Leave unplugged with the door open for at least 6 hours at room temperature or until any ice is melted. **Do not use a sharp implement to remove ice as this will damage the coating of the fridge**
- Dry thoroughly and remove any surplus water before returning to use
- Leave cooling for at least 6 hours before reloading with vaccines or pharmaceuticals

Door Lock

Your **Labcold** pharmacy and vaccine fridge is fitted with a door lock with 2 keys. To lock, push the key in gently and twist 90° to the left, to unlock twist 90° to the right. The key can be safely removed from both the locked and unlocked positions.

Keys should not be left in the lock as they protrude from the fridge. They could cause a health and safety hazard or could be knocked, which may damage the lock. Keys and locks are only covered for 90 days under the Labcold warranty

Error Codes

The display on your fridge is designed to display error codes. If you see one it is because the controller, which performs continuous diagnostic system checks, has detected a problem. Most require **immediate** action.



batt - this means that the batteries need changing. It will only display if batteries are fitted and you can still use the fridge safely



Poff - when this displays it means there is or has been a power failure. If batteries are fitted this will display even if the mains power is off



Start Error - when this displays it means there is a total system failure. **Do not use the fridge, remove contents.** Please contact your retailer



NTC - when this displays it means that the temperature probe has failed. **Do not use the fridge, remove contents.** Please contact your retailer

If, when the fridge is first plugged in the display shows **test** or it continually displays the numbers **01,02,05,10** or **15** (with no decimal point) or the display does not change to an alarm state or show a temperature value after a few minutes, there is a system failure. **Do not use the fridge, contact your retailer.**

If the display is blank it means either that the controller is not working correctly or the fridge is not getting power. You can check this. If the light comes on when the door is opened and you can hear the fridge working and it feels cold inside it means the display may be faulty. If the light does not come on and the fridge does not feel cold **do not use the fridge, please remove contents and contact your retailer.**

Trouble Shooting

My refrigerator is not working?

- Check that the fridge is plugged in and the plug socket is turned on
- Try another appliance in the power socket. If this appliance works but your fridge doesn't, please contact your retailer

There is water in my fridge

As part of the automatic off cycle defrost, ice is melted and runs in to the drain hole at the back of the fridge. If this is blocked, water will remain inside the fridge. Please check and clear the drain hole so water can run away freely.

The sides of my fridge are hot

The models RLDF0110 and RLDF0210 have the condenser in the side wall of the refrigerator so the units can be wall mounted. This gives out heat as part of normal operation and is nothing to worry about.

My fridge is making a gurgling noise

All **Labcold** refrigerators work by evaporating an environmentally friendly gas. This is what causes the back of the refrigerator to get cold, and as part of this process the gas has to turn back in to liquid. This is why sometimes you will hear liquid sounds coming from the fridge.

There is condensation on the glass door of my fridge

If the fridge door is left open too long, or the fridge is over full, or is working in a high ambient temperature or humid conditions, condensation may form. This is a normal part of the refrigeration process and as long as the temperatures remain in range, is nothing to worry about.

There is ice in my fridge

This can occur for a variety of reasons:

- The room is too warm or even damp
- The temperature is set too low - please check the set point by pushing the **set** button. Please contact the **Labcold** service team if the set point is too low (i.e below 3°C).
- The door is left open too long

The fridge is rocking

This is because the refrigerator is not on a level surface. Check that the feet have been adjusted so the top of the fridge is level and the refrigerator is standing on a hard surface.

How do I check the set point?

All **Labcold** pharmacy refrigerators have a factory set point of 5°C. This is the manufacturers recommend temperature for the storing of vaccines. If you press the **set** button on the front it will show the temperature the fridge is set to. Should you wish to change the set point please contact the **Labcold** service team at service@labcold.com.

There is water at the back of the fridge

Your **Labcold** refrigerator automatically defrosts. This means that any ice is melted and runs through the drain hole to the condensate removal tray at the back of the fridge. Due to the heat produced by the fridge motor this should evaporate but may occasionally cause water to be observed in the tray. This is perfectly normal and is nothing to worry about.

Useful Information

Your **Labcold** refrigerator comes complete with a one years parts and labour warranty. However, if you register your refrigerator you will be entitled to a **5 year warranty** and will be sent a **free** SD card for 24 hour temperature logging.*

To register your warranty, please complete the enclosed warranty form or visit our web site at www.labcold.com, click on the 'Register your warranty tab' and follow the instructions. Full warranty terms and conditions can also be viewed and downloaded from the **Labcold** website.

In the unlikely event that there is a problem with your refrigerator, you should contact your retailer in the first instance. If you bought your fridge directly from **Labcold** you should contact our service team on: **0870 300 1002** or E-mail them at service@labcold.com

When you register your warranty or want to report a performance issue you will need to have the following information to hand. Please fill this in as soon as you get your fridge so we can help you as quickly as possible in the event of a problem.

Model Number _____

Serial Number _____

Retailer _____

Date Purchased _____



*the professional choice for medical
and scientific refrigeration...*

* 5 year warranty and free SD card available to UK customers only. Outside the UK, warranty is limited to one year parts only. SD cards are available only as a chargeable extra.

Labcold Ltd, The Loddon Centre, Wade Rd, Basingstoke, RG24 8FL, UK 0870 300 1010

