



IntelliCold® Pharmacy Refrigerator Operating Instructions

www.labcold.com

WARNINGS

Servicing and repairs must be carried out by a suitably qualified engineer.
Only engineers who have been trained in the safe handling and use of hydrocarbon refrigerants can work on the refrigeration system. If you suspect a leak, do **not** touch as the refrigerant can cause eye damage. Contact the manufacturer or its service agents immediately.

If the power supply cord is damaged, it **MUST** be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Do **not** use mechanical or other means to accelerate the defrosting process.

Keep clear of obstruction all ventilation openings in the appliance enclosure.

This refrigerator is climate class 4 and is designed to operate at +16°C to +32°C ambient room temperature.

Do **not** damage the refrigerant circuit.

Maximum shelf loading 40 Kg/m².

The noise level in normal operation is lower than 70 dB

Do **not** use electrical appliances inside the refrigerator.

Do **not** store explosive substances such as aerosol cans with flammable propellant in this appliance.

Labcold RLDF/G refrigerators are for the storing of pharmaceuticals, medicines and laboratory products for professional use by suitably trained, competent persons only.



This refrigerator contains a flammable gas.

It MUST NOT be located in a room or area with a volume less than 10m³.

This refrigerator contains gas under pressure which may explode if heated.

Original instructions

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. This refrigerator contains flammable insulation gases and must be disposed of in the appropriate way by competent persons. Ensure that none of the refrigerant circuit pipes are damaged prior to disposal.

The symbol below on the appliance or accompanying documents indicates that this refrigerator should not be treated as ordinary waste but must be taken to a special collection centre for the recycling of electrical equipment. For more information regarding the treatment, recovery or recycling of this product, contact your competent local office, electrical waste disposal or vendor from whom you purchased the refrigerator.



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.

Need calibration?



Labcold are a UKAS calibration laboratory #8898



We can calibrate your refrigerator AND your independent thermometer

We don't just use UKAS traceable equipment, we use UKAS methodology and training for assured technical competence

Operating instructions for your IntelliCold® Pharmacy Refrigerator from Labcold

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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** IntelliCold® 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.

⚠ 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. Models designed to be wall mounted 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.



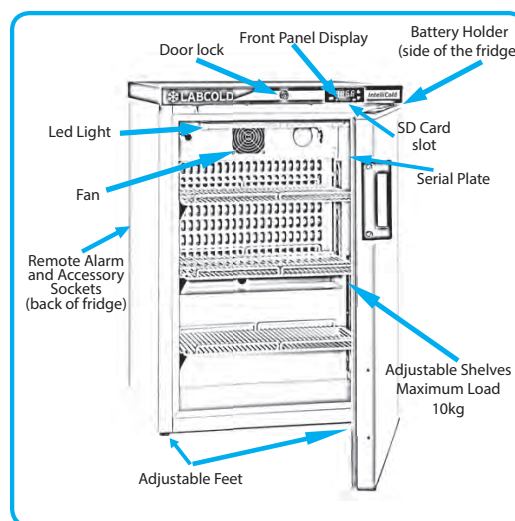
For models RLDF/G0501A, 1010A and 1510A, insert shelves by placing clips in the racking and resting the shelf on top. When positioning the shelves, please remember to keep adequate room for air circulation. **Failure to do so may cause hot spots in the fridge.**



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

⚠ 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

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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 model 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

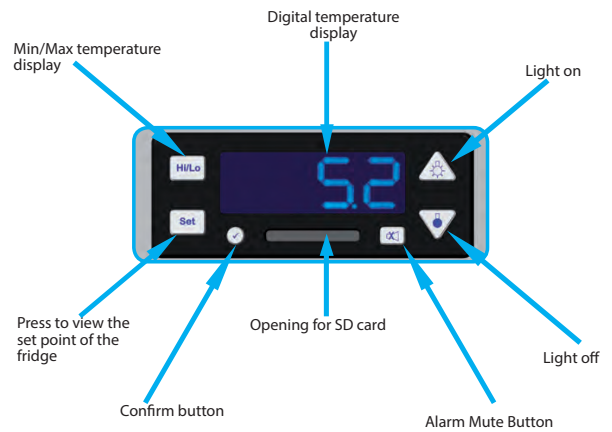
ALTHOUGH THE REFRIGERATOR WILL REACH 5°C AFTER AN HOUR (APPROX) YOU SHOULD LEAVE THE FRIDGE RUNNING FOR 24 HOURS BEFORE FILLING WITH TEMPERATURE SENSITIVE VACCINES AND PHARMACEUTICALS.

It is important that you reset the maximum/minimum temperature record after you have loaded the refrigerator for the first time (please see page 7). This will ensure that your daily temperature record is accurate when you start to use the fridge for storing medicines.

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Front Panel Display

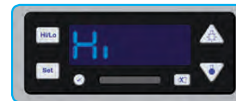
The display on the front of the refrigerator is designed to constantly show the temperature inside the fridge correct to one decimal place.



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.



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If the temperature in your refrigerator drops below 2°C an alarm will sound and the front panel will alternately flash between **Lo** and the chamber temperature. 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 3 minutes 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**

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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.



7 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.



ⓘ Earlier models will reset to the set point ie 5°C. The correct high/low reading will replace this reading as the refrigerator is used, however, if the high and low reading remains at 5°C please contact the service team on 01256 705 580.

8 Using the 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 have data from the fridge uploaded to it.



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 downloaded. It is recommended you perform a download of this data on a weekly basis and at least annually to prevent data being over written and the download failing.

If you wish to store the data on the SD card and **not** your computer (which is preferable) we recommend you get a new card every year to prevent data overwriting. New cards are available at a small cost from **Labcold**. Please e-mail sales@labcold.com.

Requirements

Your **Labcold** RLDF/G10A series pharmacy refrigerator is fitted with the unique **IntelliCold®** controller which stores temperature data for up to 13 months. To transfer this data to your PC you will require the following:

- A pre-programmed **Labcold** SD card supplied on return of warranty registration (UK customers only) or purchased separately. Only genuine **Labcold** SD cards will work with **Labcold** refrigerators.
- An SD card reader (not supplied) or port.
- CSV files will display on all PCs and Macs.
- 4 AA batteries (not supplied) fitted as shown on page 2 of the Operating Instructions. This will ensure that temperature logging and the internal timer will continue to operate during a power failure. Batteries **must** be changed yearly.

Please be aware that your **Labcold** SD card does not require any software to be downloaded to your computer and will not copy your data nor automatically download data to your computer.

YOU REQUIRE ONE LABCOLD SD CARD PER FRIDGE, OTHERWISE YOU RISK DATA BEING LOST OR OVER WRITTEN

ⓘ **We do not recommend that you leave the SD card in the refrigerator SD card slot as it may get broken or lost**

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Setting the Timer

ⓘ When you use your Labcold SD card for the first time it is essential that you set the current date and time. To do this you need to insert your SD card, snowflake side up in the slot underneath the temperature display as shown below.



ⓘ The SD card will only go into the slot up to the top of the snowflake and should not be inserted any further

Once the card is inserted, wait 5 seconds then press the tick/confirm button located to the left of the card slot. The fridge will beep and then the word **date** will show on the display.



The display will then change to allow you to set the year.



Using the up and down buttons to the right of the screen, (the top button to increase the number, the bottom to decrease), set the numbers to the last two digits of the current year ie for 2017 select 17.

When you have set the correct year, simply press the tick button and the display will then change to allow you to set the month.



To set the month, use the up and down buttons on the right, with 1 being January, 2 being February etc.

Press the tick button when you have the correct month. The display will then change to allow you to select the day.



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To set the day, use the up and down buttons on the right until the display shows today's date.

Press the tick button when you have the correct day. The display will then change to allow you to set the time.



Firstly, you need to set the hour by using the buttons on the right of the display.

Press the tick button when you have the correct hour. The display will then change to allow you to set the minutes.



Set the minutes by using the up and down buttons on the right. When you have the correct digits, press the tick button.

The fridge display will now revert to showing the temperature and the internal timer inside your controller is now set. The card can be removed. Once the timer is set, **DO NOT** reset it or adjust it, even for changes to GMT or BST, otherwise you will lose data.

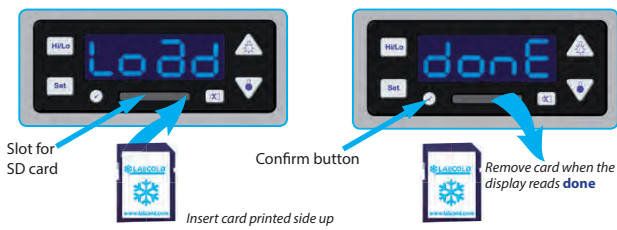
IF YOUR REFRIGERATOR DOES NOT HAVE BATTERIES INSTALLED AS A BACK UP, IN THE EVENT OF A MAINS POWER FAILURE THE TIMER MAY NEED TO BE RE-SET. FOLLOW THE INSTRUCTIONS ABOVE TO SET THE TIMER AND PLEASE BE AWARE THAT TEMPERATURE DATA MAY BE LOST AS A RESULT.

Although the Labcold IntelliCold® controller can store up to 13 months worth of temperature data, it is strongly recommended that temperature data is downloaded every week and stored to your computer or printed as a hard copy.

The refrigerator records the conditions inside the chamber every minute and all this information is downloadable to your Labcold SD card.

IN THE UNLIKELY EVENT THAT YOU HAVE A PROBLEM WITH YOUR LABCOLD REFRIGERATOR, THE SERVICE TEAM MAY ASK YOU TO DOWNLOAD TEMPERATURE DATA TO HELP RESOLVE THE ISSUE.

11 Downloading Data



Insert your Labcold SD card in the SD card slot and press the tick button. It may take up to 5 seconds for the card to register. The display will change from showing the temperature to showing the word **load**. To download the data, press the tick or confirm button.

The display will then show the number of days the fridge has been running since the data was last downloaded and count down as the data is copied to the card.

⚠ If the data has not been downloaded for a long time this may take some time and/or the download may fail and may take several attempts to download fully.

When the data has finished downloading, the display will change to show **date**.



To **NOT** reset the timer, simply press the button with the cross on it (decline) located on the right side of the SD card slot as shown above. The display will now show **done**, **Aoff** and then revert to the current temperature, you can then remove your card. However, if you need to reset the timer, you can now do so by following the instructions on page 9. Make sure all current data is downloaded before you reset the timer otherwise data will be lost

The SD card now has all the temperature data copied to it since the timer was first set on the refrigerator or the last time the data was downloaded from the controller.

The **Labcold** SD card can now be inserted into a SD card reader attached to a computer.

⚠ Please be aware that resetting the date or time may delete and alter data. We recommend that once the timer is set it should not be altered unless absolutely necessary, for example if the controller experiences a power loss.

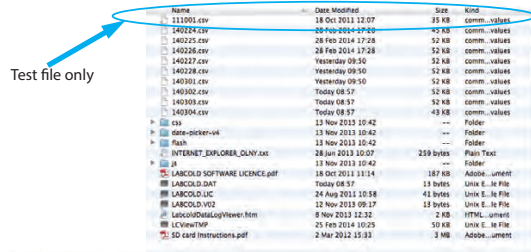
12 Viewing Data

Opening a CSV File

Insert your SD card in to a suitable card reader connected to your computer and open in the usual way.

The Labcold SD card and data download function are designed to allow the capture of temperature data in CSV format which is readable by any spreadsheet application such as Excel or Numbers. From this, data can then be viewed, saved and displayed graphically if required.

The CSV files will display in date order. The date is shown in reverse for ease of sorting so the first two digits are the year, followed by the month and then the day (YY.MM.DD). A file for the 1st October 2011 is always displayed. This is test data only and is not a reading from your refrigerator.



	A	B	C	D	E	F	G	H	I	J	K	L
1	00:00	5.2	-273.1	0	1	1	0	0	0	0	0	0
2	00:01	5.2	-273.1	0	0	1	0	0	0	0	0	0
3	00:02	5.1	-273.1	0	0	1	0	0	0	0	0	0
4	00:03	5.1	-273.1	0	0	1	0	0	0	0	0	0
5	00:04	5	-273.1	0	0	1	0	0	0	0	0	0
6	00:05	5	-273.1	0	0	1	0	0	0	0	0	0
7	00:06	5	-273.1	0	0	1	0	0	0	0	0	0
8	00:07	4.9	-273.1	0	0	1	0	0	0	0	0	0
9	00:08	5	-273.1	0	1	1	0	0	0	0	0	0
10	00:09	5	-273.1	0	1	1	0	0	0	0	0	0
11	00:10	5.1	-273.1	0	1	1	0	0	0	0	0	0
12	00:11	5.1	-273.1	0	1	1	0	0	0	0	0	0
13	00:12	5.1	-273.1	0	1	1	0	0	0	0	0	0
14	00:13	5.1	-273.1	0	0	1	0	0	0	0	0	0
15	00:14	5.1	-273.1	0	0	1	0	0	0	0	0	0
16	00:15	5.1	-273.1	0	0	1	0	0	0	0	0	0

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When you open the CSV file it will display readings taken every minute for the date chosen. The data will show refrigerator data performance in addition to the temperature including evidence of mains failure and extended door openings.

The columns read from left to right. The third column, column C, is for a second probe. If no probe is installed this column will read at absolute zero (-273.1) which is normal and nothing to worry about.

The codes for the other columns are as follows:

COLUMN	CODE	
A	Time	Time of reading
B	T1	Temperature Probe 1
C	T2	Temperature Probe 2 (if fitted)
D	1(on) or 0(off)	Door Open
E	1(on) or 0(off)	Compressor Running
F	1(on) or 0(off)	Fan Running
G	1(on) or 0(off)	Light on
H	1(on) or 0(off)	High alarm
I	1(on) or 0(off)	Low alarm
J	1(on) or 0(off)	Battery alarm
K	1(on) or 0(off)	Power off alarm

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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 first two digits of the model number ie 02 (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.**

Door Lock

Your **Labcold** pharmacy and vaccine fridge is fitted as standard with a door lock with 2 keys unless the digital lock has been specified. 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.

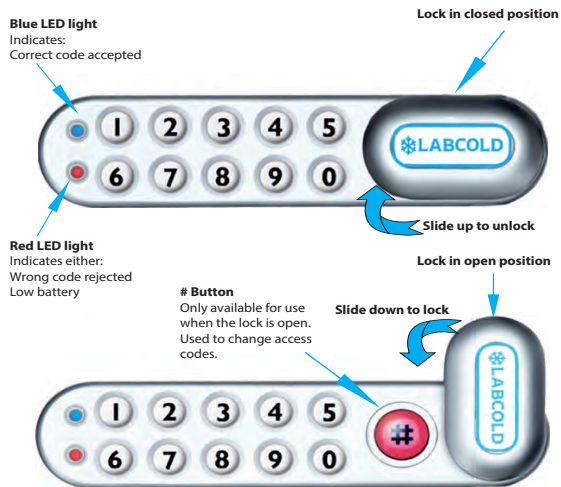
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Digital Door Lock

If you have opted to have your IntelliCold Pharmacy Refrigerator fitted with Labcold DIGILOCKDF1000 the key lock will be removed and the digital lock fitted in its place.

The digital lock has been designed to provide extra security for the contents of your pharmacy refrigerator and is backed by a one year parts and labour warranty.

A Closer Look



Getting Started

Your DIGILOCKDF1000 is supplied ready for use and fully tested. The door of your IntelliCold® refrigerator will be locked. In order to open the door the controller requires power, so please follow the instructions for your refrigerator to connect to the mains.

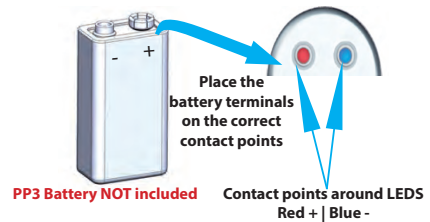
We also recommend that you install 4 AA batteries (provided) in to the battery compartment of the fridge located on the right hand side of the fridge near the base.

IF BATTERIES ARE NOT FITTED, THE LOCK WILL NOT OPEN NORMALLY IN THE EVENT OF A POWER FAILURE

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Power failure override

- Place a PP3 9 volt battery on the contact points surrounding the LED lights
- + terminal to red LED contact point
- - terminal to blue LED contact point
- Enter the master code **NOT** user code
- The lock will release



Opening the door

Once the refrigerator has power, you can now open the door using the factory set code of **2244**

Put in the code and after every correct digit the blue LED light will flash, after the fourth digit is entered the lock will make a noise signifying it is unlocked. You can then slide the lock up and open the fridge. If the red LED flashes it indicates you have entered the wrong digit and it will **not** unlock. Enter the wrong code 3 times and you have to wait 10 seconds before you can try again. If you **DO NOT** unlock within 4 seconds the door will re-lock automatically if the lock remains in the closed position.

Locking the door

Shut the fridge door as usual and slide the lock 90° in an anti clockwise direction

ⓘ the DIGILOCKDF1000 DOES NOT self lock

Programming the DIGILOCKDF1000

It is advised that you change the factory set access codes for maximum security. Before you can change the code, you must open the door using the code supplied. You also need the factory set master code which is **11335577** because the lock must be open to change the codes.

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Changing the Access Code

The master code is required to change the user code and the master code. Please note master codes must be 8 digits long and user codes 4 digits. To begin changing the code, open the lock using the user code and press the red # button by the lock. The blue LED will flash to indicate the lock is ready for programming.

ⓘ If you do NOT press a button within 4 seconds the red LED will flash and you need to start the process again.

Change the master code	<p>With the lock open key in:</p> <p># 11335577</p> <p>01 New master code New master code</p> <p>The blue LED will flash twice to show the change is successful</p>	<p>Write the new master code here</p> <p>□ □ □ □ □ □ □ □</p>
Change the user code	<p>With the lock open key in:</p> <p># master code</p> <p>02 New user code</p> <p>The blue LED will flash twice to show the change is successful</p>	<p>Write the new user code here</p> <p>□ □ □ □</p>
Delete the user code	<p>With the lock open key in:</p> <p># master code</p> <p>03</p> <p>The blue LED will flash twice show the change is successful</p>	<p>Fridge can now only be unlocked by the master code</p>

Lost code procedure

If you loose the codes it is possible to return the lock to it's factory set master code so you can open the door. It is recommended that you perform the procedure with a colleague.

- Turn off the mains power
- Remove one of the batteries from the fridge while someone holds down the **ⓘ** button
- Replace the battery and the blue LED will flash twice
- Release the **ⓘ** button
- Within **3 seconds** press the **ⓘ** button 3 times
- The blue LED will flash 3 times

The lock can now only be opened by the factory set master code **11335577** and all other settings will be lost.

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Caring for your Fridge

There are simple things you can do to help ensure your refrigerator performs at it's best and is less prone to issues:

Keep door openings to a minimum - door openings allow warm air to enter the refrigerator. This has the effect of raising the internal temperature of the fridge which makes the cooling system work harder increasing the incidence of ice.

Keep the refrigerator in an environment where the ambient temperature is between +16°C to +32°C - this is the temperature range in which your refrigerator has been tested to perform correctly. We cannot guarantee performance and therefore, do not recommend usage outside of those parameters.

Keep the refrigerator serviced and calibrated - the DH Green Book Chapter 3 v2_1 page 28 recommends that all fridges storing vaccines have at least annual servicing contract and calibration. **Labcold** can provide you with annual maintenance and calibration, please ask for a quote if you would like us to help you with this.

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.

If you are storing vaccines in your **IntelliCold®** pharmacy refrigerator, this should be recorded in accordance with recommendations in the DH Green Book, Chapter 3 v2_1 page 28.

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 no 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.

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Cleaning

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

ⓘ It is essential that you unplug the refrigerator from the mains to prevent electric shock 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 for a number of reasons, for example in times of high humidity, if the door has been opened for a long time, the refrigerator is overstocked or the ambient temperature is high.

ⓘ It is essential that you unplug the refrigerator from the mains to prevent electric shock 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 or until the temperature display show the correct temperature for at least 30 minutes before reloading with temperature sensitive contents such as vaccines or other pharmaceuticals.

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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

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. **Labcold IntelliCold®** Pharmacy Refrigerators are designed for temperate climates, 16° to 32°C, with a humidity of 60% RH.

There is ice in my fridge

Small accumulations of ice on the cold plate are quite normal and should melt away after a few minutes. Larger accumulations 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 and ice and water may be observed at the back. 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.

Why doesn't the alarm react instantly?

Labcold IntelliCold® refrigerators constantly take readings of the air temperature inside the refrigerator and averages and analyses the results. This means that if you have a separate monitor it may alarm before the fridge controller, but the refrigerator will still alarm very shortly afterwards and, if working correctly will do so long before the temperature poses a threat to the contents.

My independent thermometer shows a different temperature to the front of the fridge

Your **Labcold IntelliCold**® refrigerator has a probe placed at the rear of the fridge and the temperature displayed is calculated by analysing and averaging the temperature data collected by the probe. A thermometer placed in a different part of the refrigerator may read a slightly different temperature especially if it is placed close to the door or at the top or bottom of the fridge as these are the areas where the greatest temperature fluctuations occur.

Do I really have to have my refrigerator calibrated?

The **IntelliCold**® controller, which monitors your refrigerator, is designed to be accurate, however, the DH Green book now advises that a refrigerator storing vaccines should be calibrated annually. By calibrating your fridge annually you have documentary proof that the temperature displayed on the front of the refrigerator is the same as that inside the chamber. This may be important if the performance of the fridge is questioned by an official body. Labcold are a UKAS calibration laboratory No 8898 and are therefore capable of providing calibration to ISO 17025 standards. Why not contact our service team at service@labcold.com for more information?

My timer seems to lose and gain minutes

This is because the controller does not contain a proper clock but an oscillator which can be affected by ambient temperature and power fluctuations. It will still provide enough information to show how long there may have been a temperature incursion so there is no need to reset the timer as this is perfectly normal. Please be aware if you *do* reset the timer you may lose data.

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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 automatic 24 hour fridge data logging.*

To register your warranty, please complete the enclosed warranty form or visit our web site at www.labcold.com, click on the 'Warranty Registration' 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: **01256 705 580** or Email 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 _____

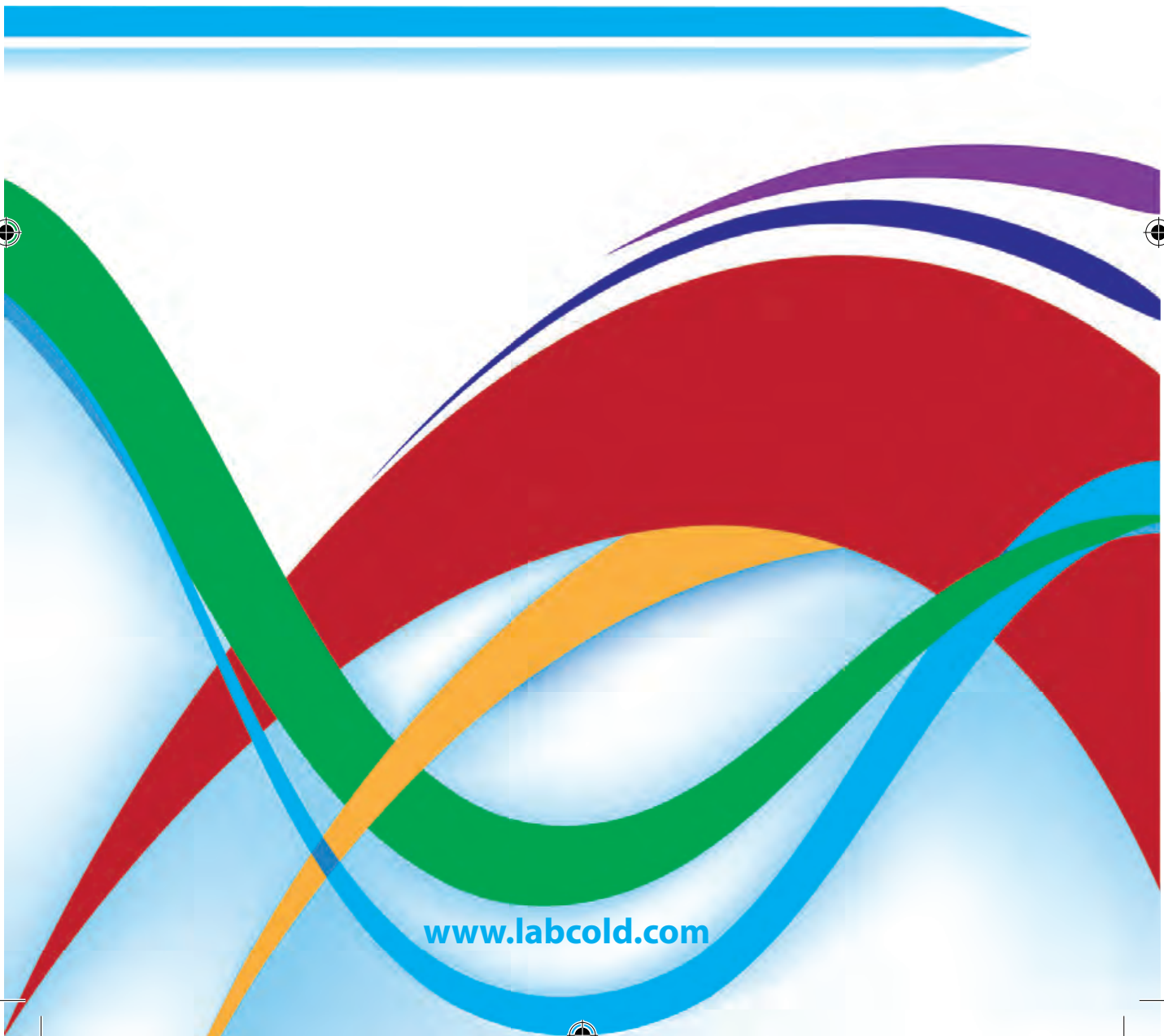
Date Purchased _____



*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.

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