

QUIRKS *Medisafe*



Operating Manual



RENTAL • SALES • SERVICE • LOGISTICS

www.quirksaustralia.com.au

Toll free number: 1800 804 627

Acknowledgement

Thank you for purchasing this Quirks Medisafe Refrigerator. This refrigerator is purpose-built, for the storage of medical vaccines. We recommend that you read this manual before operating the Medisafe refrigerator and retain it for future reference.

Contact Information

Should you require assistance, guidance or technical support, please contact:

Quirks Australia Pty Ltd. (Head Office)
198 Power Street
Glendenning NSW 2761

Phone: 1800 686 672 (24 Hour National Service Support)

Fax: (02) 8805 2544

Email: service@quirksaustralia.com.au

Medisafe Warranty

Your new Medisafe vaccine refrigerator is covered by a 12 month warranty on parts and labour. Quirks Australia will repair or replace, at our discretion, any component found to be faulty in workmanship or operation for a period of 12 months from the time of installation.

Quirks Australia would like to stress the importance of reading all provided documentation and instructions PRIOR to the storage of any vaccine or product stock.

Full instructions on the safe and appropriate operation of your unit, along with telephone support, are available in order to ensure that your new Medisafe refrigerator operates efficiently and to its capacity.

Failure to follow instructions, especially involving setting of cabinets and start up, may result in the loss of or damage to valuable stock through incorrect operation of the unit.

Quirks Australia cannot be held responsible for the loss of or damage to stock.

Please refer to the *National Vaccine Storage Guidelines: Strive for 5* (available from the Department of Health at <http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/provider-store>) for further information about vaccine storage management, or contact your local State/Territory health authority (contacts provided on Page 17).

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QUIRKS
Medisafe Quick Start Checklist

1. Place the Medisafe refrigerator in a location with a flat, level surface, with reasonable clearance from walls, and not in direct sunlight.

2. Before plugging the refrigerator in, please allow it to sit for 12 hours after shipping, so the oil in the compressor will have time to settle.

3. Ensure that a 220-240V, 50Hz power source is available. Connect the Medisafe refrigerator to the power point, and mark the power point with appropriate signs to ensure the refrigerator will not be accidentally unplugged or switched off.

4. Install the HOBOWare Lite software on your computer, following instructions on Pages 3-5 to launch the logger for the first time.

5. Connect the data logger to the Medisafe refrigerator by plugging the grey cable, located at the rear of the data control box, into the outlet marked channel **1** on the logger.

6. It is recommended to run the Medisafe refrigerator for at least 6 hours, prior to stocking with vaccines. The refrigerator may take time to reach the desired temperature range, resulting in an alarm condition. To silence the alarm, press the **prg/mute** button on the electronic controller.

7. Before stocking the refrigerator, perform one (1) readout of the data logger, following the procedure on Page 6. Please check that the data logger is recording temperature correctly.


8. Relaunch the data logger, and immediately connect it to the Medisafe refrigerator.


9. Press the **RESET** button on the High/Low temperature display.

10. Ensure the temperature inside the refrigerator is stable, within the safe range of +2°C to +8°C. You may now stock the refrigerator with vaccines. Take care to allow for sufficient air flow throughout the refrigerator. Minimise door openings to maintain a stable temperature while the refrigerator is being stocked.

11. *If your Medisafe refrigerator is fitted with an Auto Dialer, you may now connect it to the wall socket, using the standard telephone cable provided. Move the switch at the back of the header control panel to the ON position.*

Getting Started

 **If the vaccine cabinet was shipped to you, please wait twelve hours prior to turning it on. This will allow the oil in the compressor time to settle after shipping.**

 **Quirks Medisafe refrigerators are powered by electric current, which can cause serious injury. Any installation, cleaning, or troubleshooting must be conducted with the electrical power source disconnected from the unit.**

The following precautions should be taken while the unit is in operation:

- Ensure the appropriate power is supplied to the unit. Note: Quirks Medisafe units are designed to operate at 220-240V, 50Hz.
- Do not plug several appliances into the same multiple receptacle
- Electrical components should not come into contact with water
- Ensure the power cord is not damaged. If the cord becomes damaged, it must be replaced by the manufacturer, a certified service agent or qualified service professional.

 **It is strongly recommended that any servicing of the unit be performed by Quirks Australia.**

Installation

- Place the Medisafe refrigerator in a location with a flat surface that is approximately level, with reasonable clearance from any walls, and without exposure to direct sunlight.
- Allow clearance to the right, left, back and top. This will reduce power consumption and allow the internal cooling system to function correctly. The unit is not to be placed in confined areas where air flow and heat dissipation are restricted.
- Ensure that the appropriate power is supplied to the unit. Note: Quirks Medisafe refrigerators are designed to operate at 220-240V, 50Hz. National and local codes provide specific electrical and mechanical installation requirements and recommendations covering equipment and equipment wiring.
- Plug in and turn on the power to the Medisafe refrigerator. Ensure the power point is secure, that the refrigerator cannot be accidentally unplugged or switched off.

Basic Operation

- The Medisafe refrigerator is pre-set for operation.
- No buttons are to be touched except the **prg/mute** button, used to silence the audible alarm.

 **It is recommended to run the Medisafe refrigerator for 6 hours prior to loading with vaccines.**

Stocking the Medisafe Refrigerator


The Medisafe vaccine refrigerator is designed to maintain a uniform temperature inside the cabinet. To do so, sufficient air flow is required to prevent “cold spots” from forming. Thus, it is important that an appropriate level of care be taken in stocking the refrigerator.

- Cool the vaccine refrigerator before stocking with vaccine. Quirks Australia recommends allowing the refrigerator to run for at least 6 hours prior to loading with vaccines.
- Distribute stock evenly throughout the refrigerator.
- Ensure vaccines with the shortest expiry are stored at the front of the refrigerator.
- DO NOT place stock directly against the evaporator plate, at the rear of the refrigerator. This could cause the stock to freeze.
- DO NOT place large cartons inside the refrigerator (i.e. at the bottom of the cabinet). Remove smaller boxes from the carton, and place them evenly spaced on the shelves.
- Some vaccines are sensitive to ultraviolet (UV) light. Please check the specific vaccine storage guidelines before removing vaccines from their boxes.
- If trays are used, ensure they are made of plastic, with holes to allow for sufficient air flow, and spaced evenly on the shelves.
- DO NOT overstock the refrigerator.
- If very few vaccines are stocked, thermal mass (such as cooled water bottles) should be added to the refrigerator in areas of open space.

Silencing the alarm

The cooling system of the Medisafe refrigerator is controlled by an electronic controller, incorporating an audible and visual alarm, should the cabinet temperature fall or rise outside the specified range(+2 to +8°C). This is likely to occur during the first cooling cycle, and may occur if the door is left open for an extended period of time.

To silence the alarm: press the **prg/mute** button on the electronic controller.

 **When you first turn the cabinet on, if it does not reach a temperature below 8 degrees within 10 minutes, it will alarm. This is a normal function. All you are required to do is press the *prg/mute* button to silence the alarm and restart the cooling process.**

Setting up the Data Logger

The HOBOWare Lite software (v.2.7.1 and above) is designed for use with Windows 2000/XP, Windows Vista, and Mac OS X. Previous versions of the software are not compatible with Windows Vista. Please contact Quirks Australia if your operating system is not supported.

Step 1 – Installation of HOBOWare Lite software

It is strongly recommended that you close down all other applications prior to the installation of your new HOBOWare Lite software. **Note:** You must be logged in as an administrator on your computer to install the HOBOWare Lite software.

- Insert the CD in your computer's CD-ROM drive. The installation program should start automatically. If it does not, navigate to the CD drive in **My Computer** and double-click on **HOBOWareLite_Setup.exe** (Mac OS X users: double-click on the **HOBOWareLite.pkg** icon in Finder) to launch the HOBOWare Lite Installer.

***Tip:** HOBOWare Lite requires the Java 2 Runtime Environment. If the correct Java 2 Runtime Environment version is not already installed on your computer, the HOBOWare Lite Setup program will ask if you want to install it now. (You must be logged in as an administrator on your computer to install the Java 2 Runtime Environment.) Click Yes and follow the prompts. After Java 2 Runtime Environment is installed, the HOBOWare Lite installation will continue.*

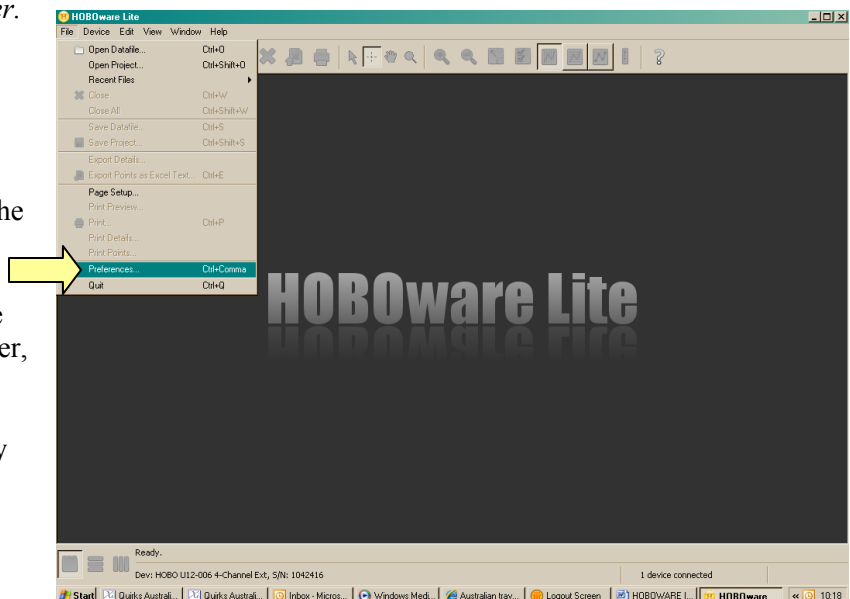
- Follow the prompts to install HOBOWare Lite. Please agree to the terms and conditions to complete the installation.
- HOBOWare Lite should open automatically when the installation is complete (unless you uncheck the Launch HOBOWare Lite box on the final dialog before clicking Finish). If it does not open by itself, double-click the HOBOWare Lite icon on your desktop or, from the Start menu, select Programs, Onset Applications, HOBOWare Lite.

***Mac OS X users:** You will need to restart your computer to complete the installation. After restarting, open HOBOWare Lite by double-clicking the HOBOWare Lite icon in your computer's Applications folder.*

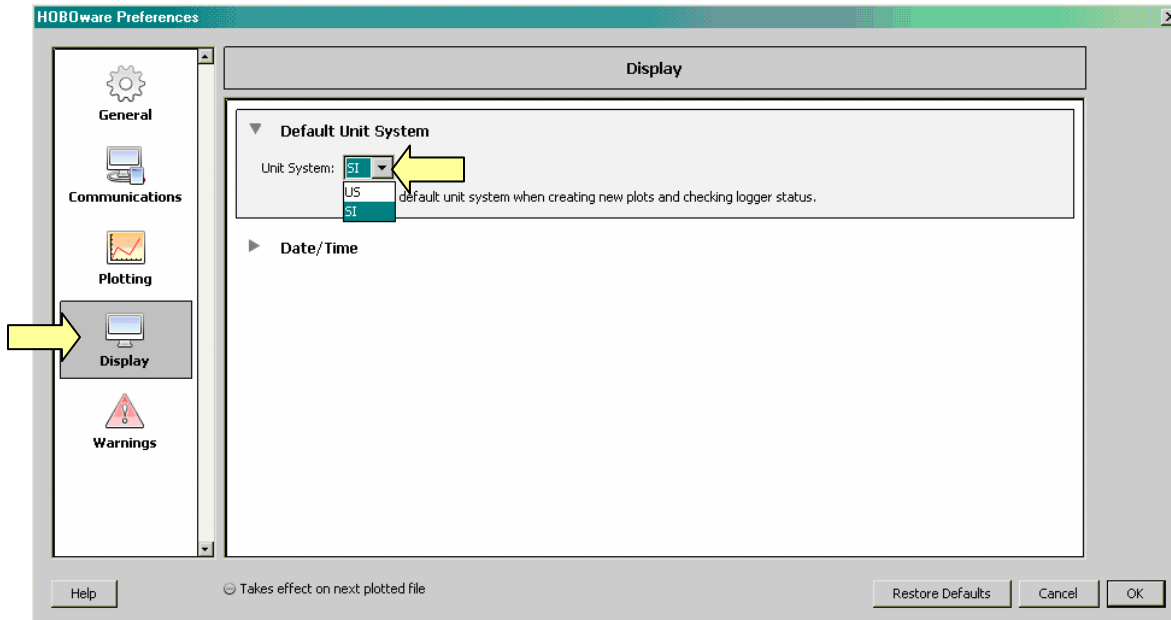
Step 2 – Change Display Preferences

Before using the data logger for the first time, it is a good idea to change the **Default Unit System** to **SI**.

- After opening the HOBOWare Lite software on your computer, click on **File** in the menu bar and move the cursor down to **Preferences**. This will display the HOBOWare Preferences window.

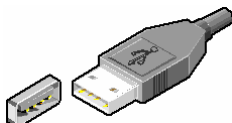


In the **HOBOWare Preferences** window, click on **Display** in the left menu to open the Display Preferences. Click on **Default Unit System** and change the Unit System to **SI**. This will ensure that readout temperatures are displayed in degrees Celsius.



Step 3 – Connecting your data logger

- Ensure the HOBOWare Lite software is open on your system.



Connect the data logger to an available USB port on your computer, using the USB data cable supplied.




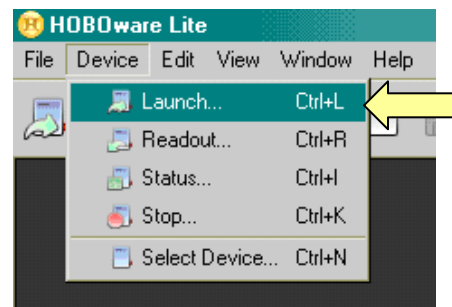
The opposite end of the USB cable connects to the mini-USB port on the data logger.

- When the logger is recognized by HOBOWare Lite, the right side of the status bar at the bottom of the HOBOWare Lite window will update to reflect the number of loggers connected. At this point, you can begin using the logger.

Step 4 – Launching your data logger for the first time

Launching the data logger will allow the device to start recording data. *Please check the settings before launching the data logger for the first time.*

Click on the Launch icon  in the toolbar, or click on the **Device** menu in the menu bar and move the cursor down to **Launch...**



The **Launch Logger** screen will appear. Please review the following settings before continuing with the logger launch:

- In the **Description** panel, please record your business name. It is also recommended that the location of the Medisafe unit be added to the description, as this will appear on all reports, etc.
- In the **Channels to Log** panel, check (tick) channel 1.
 - Ensure that **TMCx-HD (Water/Soil Temperature)** is selected from the drop-down menu.
 - Channel 1 is the only box that should be checked, all others are to be unchecked.
- In the **Logging Interval** option, set the interval to 3 minutes
 - The interval may be adjusted to suit regulatory/insurance requirements. Please note that the seconds (**Sec**) field must be changed before changing the minutes (**Min**).
- Select **Launch Options** as **Now**.

Launch Logger

Logger Type: HOBO U12-006 4-Channel Ext
Serial Number: 1262966
Deployment Number: 47
Battery Level: 100 %

Description: NAME OF PHARMACY OR PRACTICE

Channels to Log:

<input checked="" type="checkbox"/>	1)	TMCx-HD (Water/Soil Temperature)
<input type="checkbox"/>	2)	TMCx-HA (Wide-Range Temperatu...
<input type="checkbox"/>	3)	TMCx-HA (Wide-Range Temperatu...
<input type="checkbox"/>	4)	TMCx-HA (Wide-Range Temperatu...
<input type="checkbox"/>	5)	Logger's Battery Voltage

Utilities: Scaling...

Logging Interval: 0 Hr 5 Min 0 Sec
Maximum logging interval: 18 Hr 12 Min 15 Sec

Logging Duration: 150 Days, 20 Hr 20 Min 00 Sec
(Approx. time to fill logger)

This value is based on the logging interval and channel(s) selected above; it does not account for memory used by events.

Launch Options:

Now: 08:58:09 AM GMT+10:00
At Interval: 07/07/09 09:00:00 AM GMT+10:00
Delayed: 7/07/09 09:00:00 AM GMT+10:00
Maximum delay: 194 Days 4 Hr 20 Min 15 Sec
Trigger: Push Logger Button for 3 Seconds

Help Cancel Status... Launch

Once you have reviewed the settings, click **Launch** to begin logging. HOBOWare Lite will display the progress of the launch and warn you not to unplug the logger while it is being configured.


Launching Logger

Logger is now logging. Do not unplug while logger is being configured.

45%

Wrote 204 bytes of 428

Step 5 – Installing data logger on Medisafe unit

 **Once the data logger has been launched, it should be disconnected and transferred to the fridge within the logging interval (default 3 min) to avoid logging incorrect readings.**

Once the logger is finished launching:


Unplug the logger from the USB data cable and place on Medisafe Unit, ensuring that the temperature probe (grey cable, located at the rear of the data control box on top of your Medisafe unit) is plugged into the outlet marked number **1**.

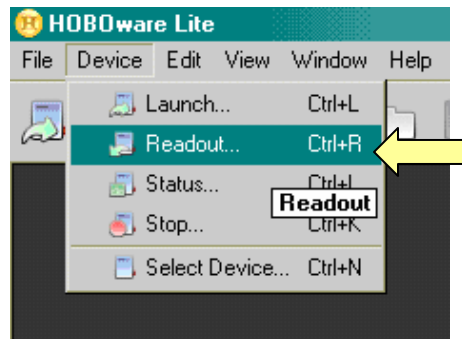


After the logger is installed correctly, it will collect temperature data from the simulated vaccine core inside the refrigerator. Temperatures will be recorded every logging interval, as specified above, until the data logger is transferred to the PC to download the collected data.

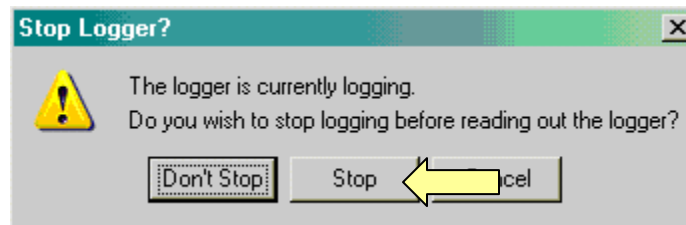
*Note: Always use **Channel 1** to keep consistent temperature data during the operation of the Medisafe.*

Step 6 – Retrieving data from the logger

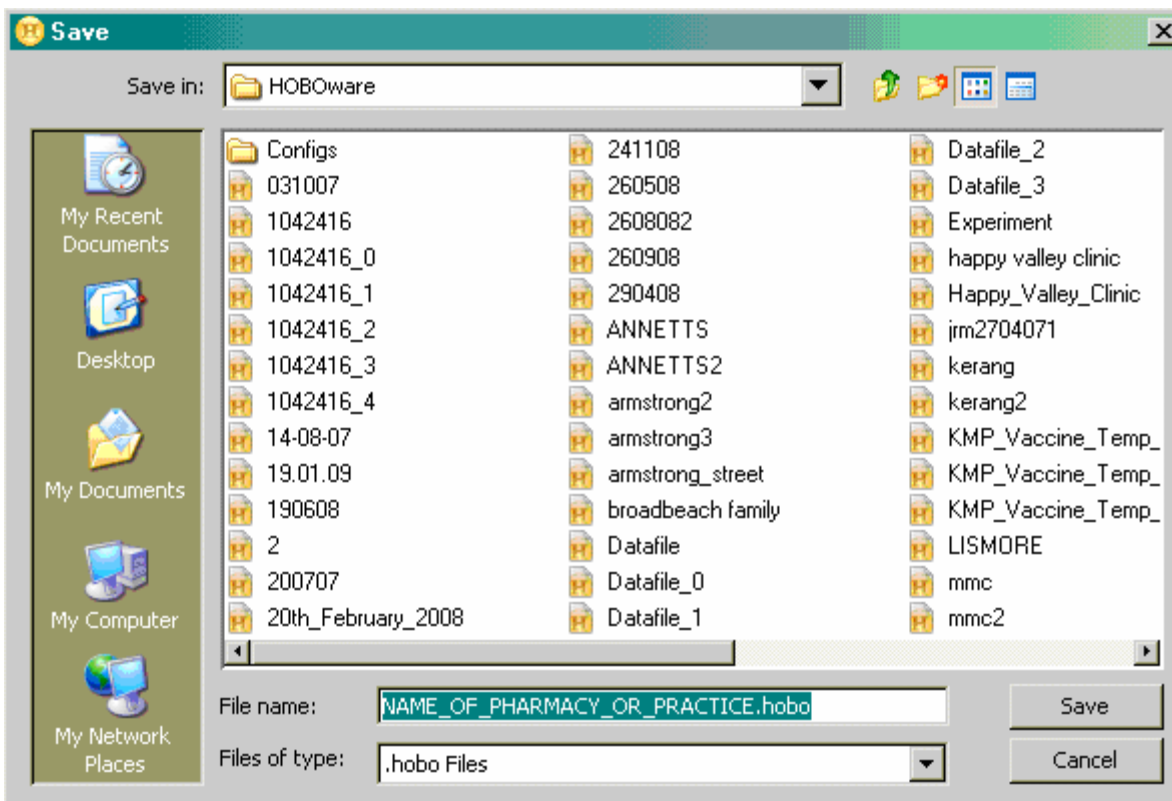
- Disconnect the temperature probe (grey cable) and remove logger from Medisafe unit.
- Connect the data logger to your computer, following the instructions in **Step 3**.
- Click on the Readout icon  in the toolbar, or click on the **Device** menu in the menu bar and move the cursor down to **Readout...**



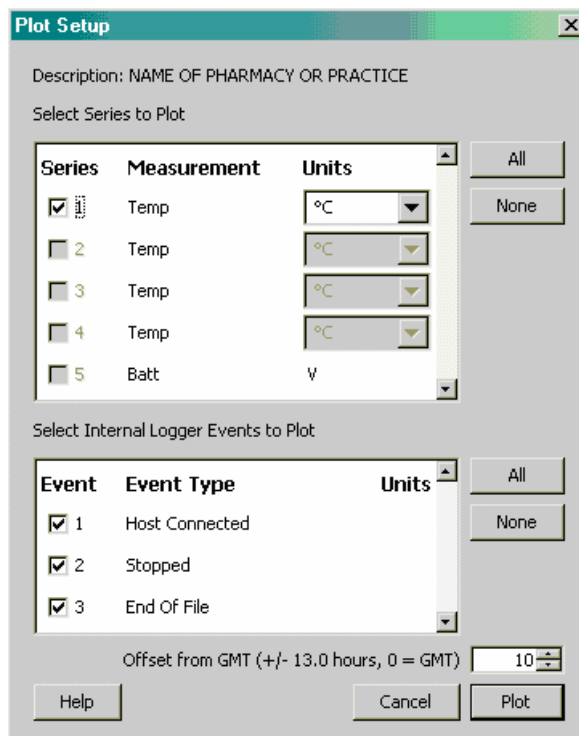
- **Stop logger?** prompt will be displayed – click **Stop**



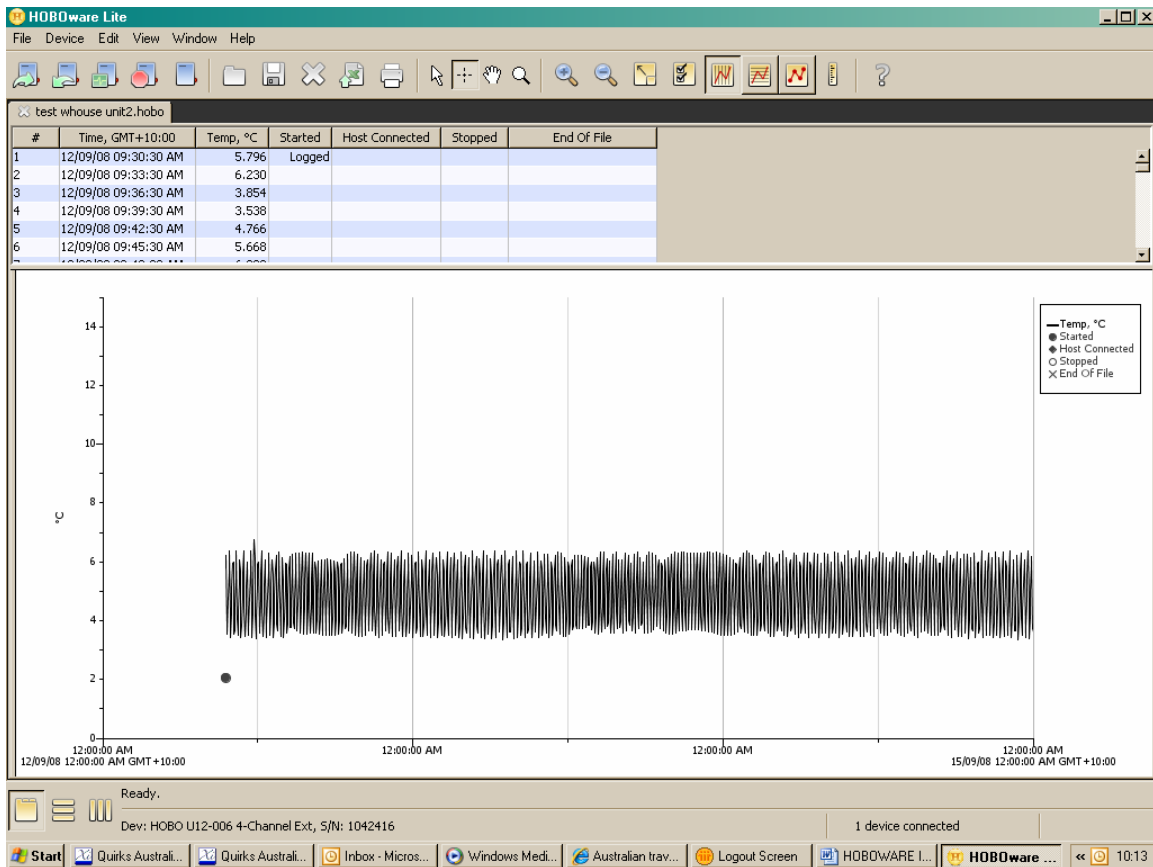
After reading out the logger, HOBOWare Lite will prompt you to **Save** the datafile to your chosen folder/location on your computer (Quirks Australia recommends using the date and location of your data logger as the file name).



Once the datafile is saved, the **Plot Setup** dialog is displayed. Review the settings, ensuring that Channel 1 is selected and the desired units are correct, then click **Plot** to display the temperature graph and data log.



The temperature graph and data log display the results of your deployment. Your screen will not match this example exactly, depending on the data recorded and the Plot Properties (see **Step 8**).




At this point, your datafile has been saved to your computer, and can be accessed at a later date. You may choose to **Print** (**Step 8**) the temperature data, or **Relaunch** your logger to continue recording Medisafe temperature data (**Step 7**).

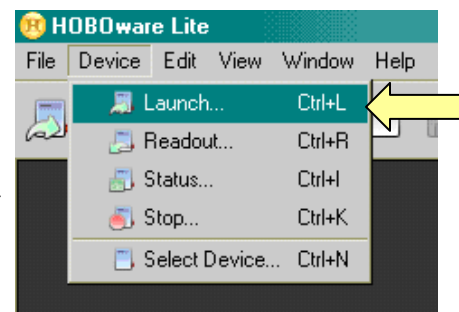
⚠ Remember to RELAUNCH your data logger before connecting it to the Medisafe refrigerator!

Step 7 – Relaunching your data logger

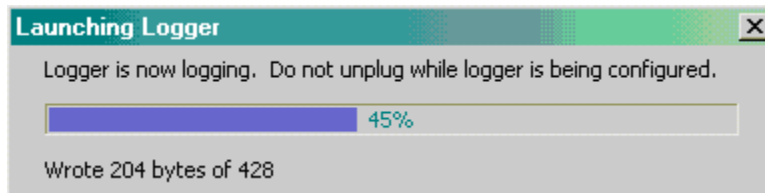
As in **Step 4**, launching the data logger will allow the device to start recording data. *Previously recorded data will be erased.*

Click on the Launch icon  in the toolbar, or click on the **Device** menu in the menu bar and move the cursor down to **Launch...**

Once you have reviewed the settings, click **Launch** to begin logging. *HOBOWare Lite will remember the previous settings. Refer to Step 4 to check Quirks Australia recommended settings.*



HOBOWare Lite will display the progress of the launch and warn you not to unplug the logger while it is being configured




- Return the data logger to the Medisafe refrigerator, following the process in **Step 5**.
- To retrieve the next data set, return to Step 6.

Step 8 – Working with data

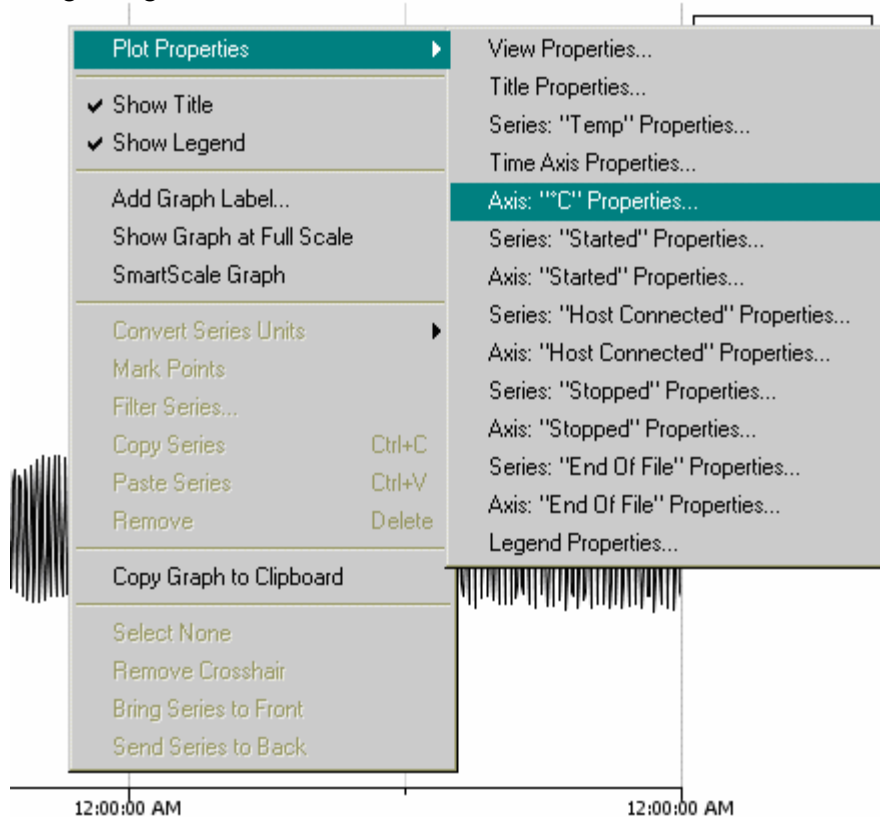
To work with current readout data, skip to **Viewing the plot**.

Opening a datafile

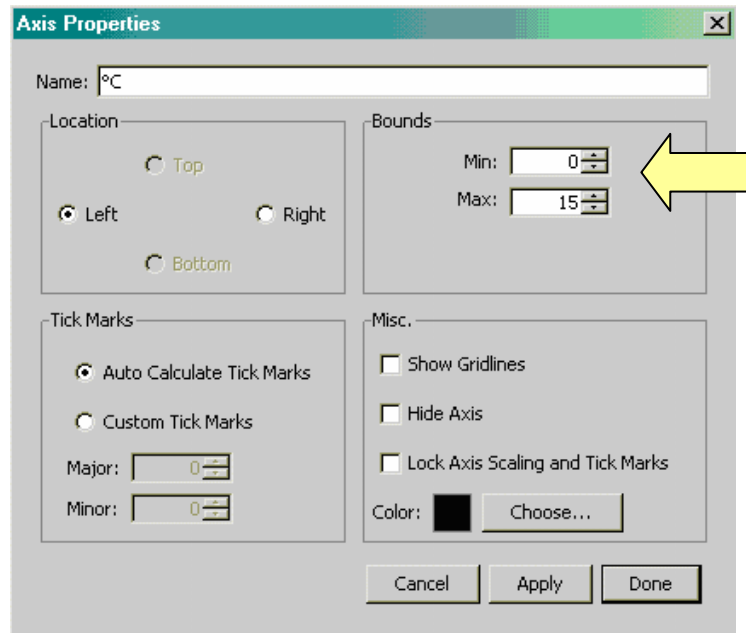
Click the Open icon  in the toolbar, or choose **Open Datafile...** from the File menu then select a compatible file (.hobo, .hsec, or .hproj) and click **Open**.

Viewing the plot

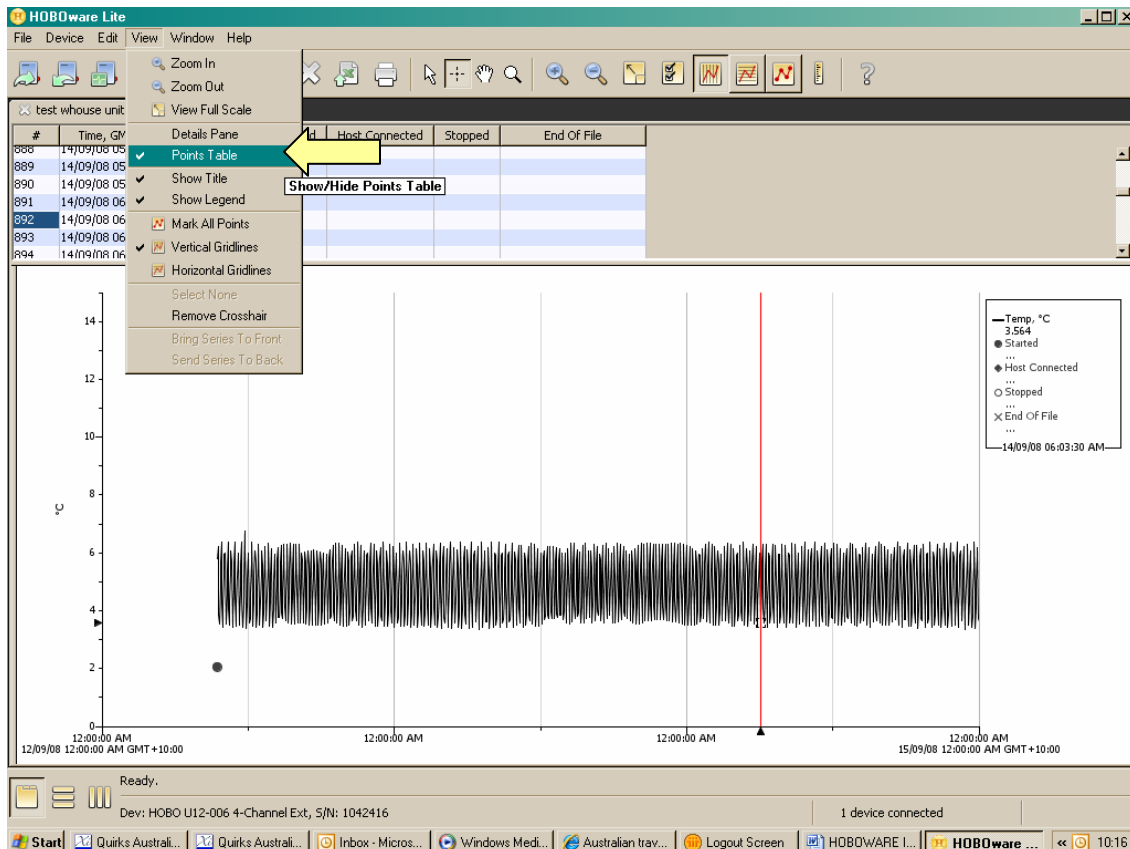
The plot will display the temperature data for the period data was collected. This may be difficult to interpret, based on the how the plot is set up. To change the plot properties, right-click on the plot to display the following dialog.



In the **Plot Properties** menu, you may want to change the *Time Axis*, which will allow you to choose a specific time window by changing the minimum and maximum recording intervals. However, it is recommended you examine the entire time interval for any temperatures recorded outside the allowable range. You may also want to change the temperature range displayed, which is done by selecting **Axis:”°C” Properties...**



Another way to accurately interpret temperature data is to display the individual points in the **Points Table**. To show the table, choose **Points Table** from the **View** menu. You can then click on specific times to display that record in the table.




Printing the datafile

To set up the paper for printing the graph:

- Choose **Page Setup** from the File menu.
- Change the paper type, orientation, and margins as necessary, then click **OK**.

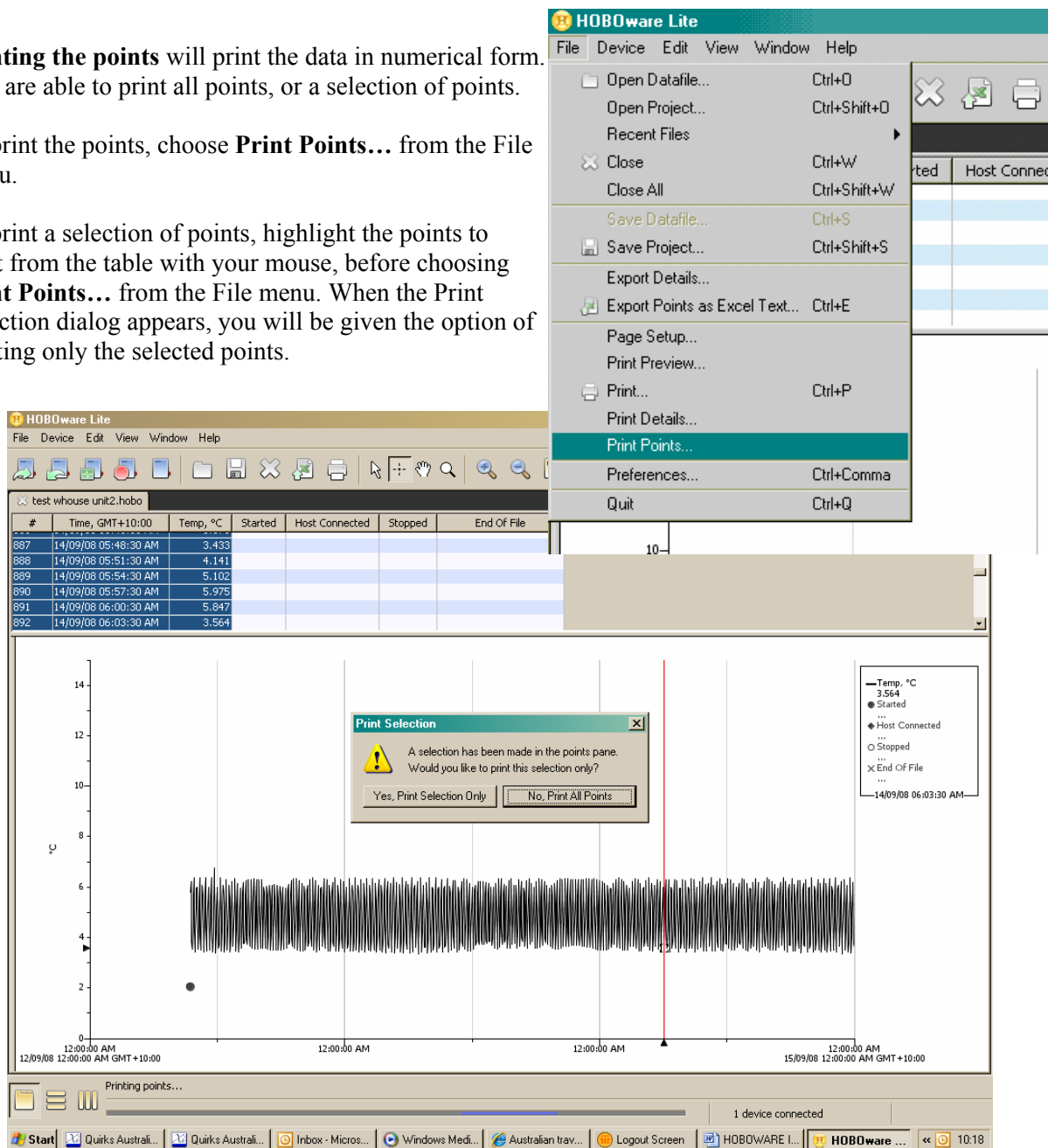
To print the graph:

- Click on the Print icon  in the toolbar, or choose **Print...** from the File menu.
- Select the appropriate printer, if applicable, and click **OK**.

Printing the points will print the data in numerical form. You are able to print all points, or a selection of points.

To print the points, choose **Print Points...** from the File menu.

To print a selection of points, highlight the points to print from the table with your mouse, before choosing **Print Points...** from the File menu. When the Print Selection dialog appears, you will be given the option of printing only the selected points.



The screenshot displays the HOBOWare Lite interface. The File menu is open, showing options like 'Open Datafile...', 'Save Datafile...', 'Print...', and 'Print Points...'. The 'Print Points...' option is highlighted. Below the menu, a table shows data points with columns for '#', 'Time, GMT+10:00', 'Temp, °C', 'Started', 'Host Connected', 'Stopped', and 'End Of File'. A graph below the table shows a temperature trace over time. A 'Print Selection' dialog box is open, asking 'A selection has been made in the points pane. Would you like to print this selection only?' with 'Yes, Print Selection Only' and 'No, Print All Points' buttons.

#	Time, GMT+10:00	Temp, °C	Started	Host Connected	Stopped	End Of File
887	14/09/08 05:48:30 AM	3.433				
888	14/09/08 05:51:30 AM	4.141				
889	14/09/08 05:54:30 AM	5.102				
890	14/09/08 05:57:30 AM	5.975				
891	14/09/08 06:00:30 AM	5.847				
892	14/09/08 06:03:30 AM	3.564				

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QUIRKS *Medisafe* Control and Monitoring System

Temperature Control System:

This highly accurate electronic control incorporates a temperature probe and thermostat.

- A temperature probe measures the air temperature in the cabinet.
- The electronic controller is programmed to the required temperature parameters (+2 to +8°C).
- The controller cycles the refrigeration system to maintain the air temperature inside the cabinet, within the required parameters.

Should the temperature of the cabinet fall or rise outside the set parameters, the controller will trigger both an audible and visual alarm (the digital display will flash –“LO” for below set parameter or “HI” for above set parameter).

A suitable delay (5 min.) is programmed into the system to prevent unnecessary false alarms (such as door being open for extended periods).

If an alarm condition occurs, press the **alarm mute button** to silence the audible alarm.



alarm mute button

The electronic controller is pre-programmed, during the manufacturing process.

The only button the customer is required to press is the **prg/mute** button. If the cabinet alarms, you can press this to silence it. Any reprogramming of the controller must be done by a person approved by Quirks Australia.

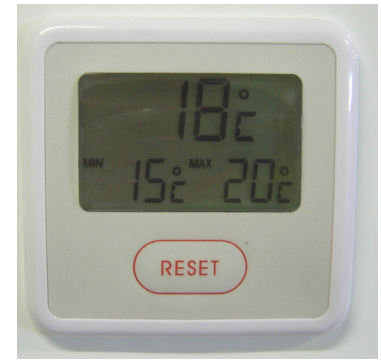
When you first turn the cabinet on, if it does not reach a temperature below +8 °C within 10 minutes, it will alarm. This is a normal function. All you are required to do is press the **prg/mute** button to silence the alarm and restart the cooling process

If an alarm condition has occurred, please allow 10-15 minutes for recovery.

Should you experience any issues with the Medisafe refrigerator maintaining temperature within the set parameters, please contact Quirks Australia.

High/Low Temperature Display:

The top left display (pictured to the right) is the minimum and maximum thermometer reading. This displays the maximum and minimum air temperatures reached inside the refrigerator, since the last reset.



Note: The maximum temperature will rise if the door is left open for an extended period of time.

! It is essential that the reset button is pressed before leaving the premises to ensure a true reading is viewed the following morning.

(Some regulations governing vaccine storage may require you to reset the display more frequently than once daily, please check with your State/Territory health authority for further information).

! The current temperature before pressing the re-set button should be between the required temperatures of +2°C to +8°C.

The High/Low Temperature Display is to be used as a guide only, providing an early indication of developing conditions inside the refrigerator. **Always refer to your data logger for an accurate readout of vaccine core temperature.**

Data Logger:

The data logger (pictured to the right) records vaccine temperature data over time



- Temperature is recorded from a probe inside the refrigerator cabinet, surrounded by transfer gel, providing a *simulated vaccine core temperature*.
- Temperature information is downloaded to a PC or Mac, using the HOBOWare Lite software provided (see **Setting up the data logger**).
 - This information can be used in regulatory audits and insurance claims, to provide an accurate representation of vaccine core temperature inside the Medisafe refrigerator, during its operation.
 - Temperature patterns are recorded over time, providing indication of damaged seals, or changes in operating temperature.

! The data logger must be connected to the PC immediately after it has been removed from the Medisafe for downloading, and reconnected to the Medisafe immediately after launching, otherwise false readings will result!

! **DO NOT USE** vaccines exposed to temperatures below +2°C or above +8°C, as recorded by your data logger, without obtaining further advice. Do not discard these vaccines. Isolate vaccines and contact the State/Territory health authorities for advice on the National Immunisation Program vaccines and the manufacturer/supplier for privately purchased vaccines.

Recommendations for the discarding of vaccines may differ between health authorities and manufacturers. **Do not discard any vaccines until you discuss the necessary actions.**

Auto Dialer (Optional):

The auto dialer is an optional remote monitoring device contained within the control panel, connected to a dedicated analogue telephone line (it cannot be connected to digital or PABX systems). In the event of a power failure, the auto dialer will dial 5 pre-programmed phone numbers, in sequence, until the alarm is acknowledged. This will provide specified persons with notification that alternate vaccine storage arrangements are required to prevent loss of stock.

Setup:

- Connect the Auto Dialer phone jack to the wall socket, using the standard telephone cable provided.
- Move the switch at the back of the header control panel to the ON position.

The auto dialer has been programmed to ring the following phone numbers, in rotation, if an alarm condition occurs when the premises are unattended. (such as a power failure).

- 1.
- 2.
- 3.
- 4.
- 5.

Acknowledgement of Auto Dialer notification:

- When the phone is answered, a unique (“*whish*”) sound will be heard.
- The call must also be acknowledged by pressing “**5**” on the telephone keypad.
- If the call is not answered, or rings out and goes to message bank, the auto dialer will not have received any acknowledgement and continue to dial the pre-programmed phone numbers in rotation until the call is acknowledged.

** Should reprogramming of the auto dialer be required, please contact Quirks Australia at 1800 686 672*

Troubleshooting



Caution: Service should be performed only by qualified maintenance or refrigeration mechanics. For assistance, please contact Quirks Australia.

Issue	Possible Cause	Further Information / Action to be taken
Refrigerator will not run	No power	<ul style="list-style-type: none"> • Check that appropriate power is supplied to the unit. Before turning on check to see if it is safe! • Check fuses from main power supply.
Temperature is too low	Operating conditions	<ul style="list-style-type: none"> • Check that there is sufficient air flow inside the refrigerator cabinet; that there are no large boxes or trays, stock is evenly distributed throughout the shelves, and there is space between stock and the evaporator plate at the rear of the cabinet.
Temperature is too high	Operating conditions	<ul style="list-style-type: none"> • Ensure that the unit is not located in direct sunlight, or in an area where the ambient temperature is above 30°C. • Check the condenser coil (located at the back of the unit) to ensure it is clean and not located in a confined space, so that air flow and heat dissipation are not restricted. • Check that the door has not been left open. • Check that the seal has not been damaged, allowing cold air to escape from the refrigerated cabinet. If a new seal is required, please contact Quirks Australia.
	System operating with low or high refrigerant pressures	<ul style="list-style-type: none"> • If system is operating with pressure lower or higher than design refrigerant pressures. It will have less cooling capacity. • High pressure can be the result of service issues such as dirty condenser coils, failed condenser fans, non condensables in the refrigeration system, system over-charge, or high ambient conditions. A qualified refrigeration technician should be called to determine the problem and repair as required. • Low pressure problems can be the result of a low refrigerant charge, dirty evaporator, plugged refrigerant filter dryer, damaged capillary valve, high superheat adjustment, or failed evaporator fan. A qualified refrigeration technician should be called to determine the problem and repair as required.
	Compressor problem	<ul style="list-style-type: none"> • Compressor has internal damage, causing less cooling capacity.

Issue	Possible Cause	Further Information / Action to be taken
High/Low Temperature Display reading incorrect temperature or blank	Battery needs replacement	<ul style="list-style-type: none"> • This must be performed by a qualified service technician. Please contact Quirks Australia.
Data Logger not recording	Not connected	<ul style="list-style-type: none"> • When recording, ensure the temperature probe (grey cable at the back of the control unit) is connected to channel 1 on the data logger. • When downloading, ensure the data logger is connected it to the computer using the USB cable provided. If it is connected, it will be displayed in the HOBOWare Lite status bar at the bottom-right of the screen.
	Logger not launched	<ul style="list-style-type: none"> • Check the status of the logger, by connecting it to the computer using the USB cable provided and choosing Status from the Device menu. If the logger has not been launched, follow the relaunching sequence (Step 7) on Page 8.
	Battery needs replacement	<ul style="list-style-type: none"> • Disconnect the data logger from the refrigerator and PC. A small Phillips-head screwdriver is used to open the battery compartment. Replace the expired battery with a CR2032 lithium battery.

For further information regarding vaccine storage and handling, please refer to the *National Vaccine Storage Guidelines: Strive for 5* (available from the Department of Health and Ageing, at <http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/provider-store>), or contact one of the following:

National Immunisation Infoline 1800 671 811

State and Territory Health Department telephone contact details for immunisation

Australian Capital Territory 02 6205 2300
ACT Health

New South Wales 02 9391 9000 (Switchboard)
Department of Health Contact your local Public Health Unit (look under "Health" in the White pages) for region-specific information

Northern Territory 09 8922 8315
Department of Health and Families

Queensland 07 3234 1500
Queensland Health

South Australia 08 8226 7177
Department of Health

Tasmania 03 6222 7724 or 1800 671 738 (within Tasmania only)
Department of Health and Human Services

Victoria 1300 882 008
Department of Human Services

Western Australia 08 9321 1312
Department of Health