
Cryopak
DIGITAL


# iLog

## Data Logger

www.CryopakDigital.com

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# iLog User Guide

Thank you for purchasing this Cryopak Digital product.
Please read this quick reference guide before using the unit.

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# Table of Contents

# 1. Safety Instructions

In no circumstance should heavy force be applied to your iLog logger. Applying heavy force to any part of your iLog could result in logger malfunction and/or injury.

Your iLog logger should only be operated within the parameters specified in the technical data discussed within this user manual. A failure to follow these instructions could result in you iLog logger malfunctioning and cause permanent damage to the unit.

Certain models of iLog loggers are vulnerable to damage when contact with water takes place. Please check your iLog loggers IP rating before placing your iLog logger in such conditions.

Your iLog logger is not to be subjected to a naked flame. Exposures to such conditions may result in damage to your iLog logger and result in an explosion of the battery.

Never operate your iLog logger with a low battery. We recommend that you replace the battery as soon as the battery low symbol is indicated on your iLog logger's display.

For iLog loggers which operate external sensors, we recommend that the sensor be unplugged by holding the gold connector, not removed via the sensor cable.

Do not attempt to repair or modify any part of this logger. Such actions will result in a loss of warranty. All repairs are to be made by an official CRYOPAK DIGITAL service center.

For iLog loggers which operate external sensors, it is important to keep the sensor tip clean to ensure that the data collected is accurate.

To keep your iLog loggers' recordings accurate, we recommend that you perform annual calibration of this device.

If an iLog Humidity loggers' humidity sensor comes into direct contact with moisture it will not perform accurately. We recommend that that you clean your iLog's humidity sensor on a regular basis (see instructions located within this manual).

Once your logger's case has been opened and the warranty seal is broken your iLog logger is no longer covered by warranty. This includes the replacement of your logger's battery.

Only subject your iLog logger external sensor(s) to temperatures below -40 ºC. The logger itself is not designed to operate at temperatures below this point.

Battery life depends greatly on the quality of battery fitted, the temperature your iLog logger is operated at and the recording frequency your iLog logger is logging at.

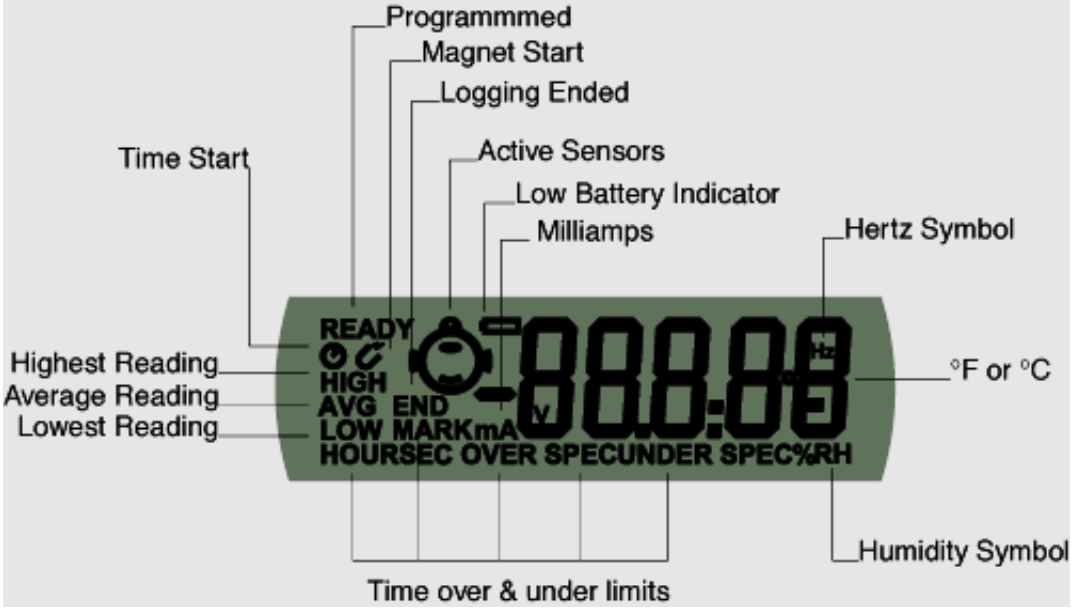
Do not use batteries other than those specified in our documentation. A failure to use the correct battery could result in poor performance and/or logger malfunction.

# 2. Logger features

- Internal, Internal/External, Two External and Internal/humidity sensor options.
- 32,000 readings
- Large LCD with multi-functional viewing
- Visual and audible alarms
- Bookmark capabilities
- Wide temperature range (high heat, ambient, refrigerated, frozen and dry ice)
- Accuracy ±0.35 °C, resolution 0.1°C
- Detachable, customizable external sensor lengths and probe styles. External sensor connector(s) being located on either side of your logger's case for fast temperature response.
- Lug (loop on top) to fix logger on wall or another surface as required.
- Display showing last temperature measurement taken plus alarm status (High Alarm / Low Alarm), or status of the logger. Optional statistics (e.g., highest, lowest, and average) can be chosen during logger programming.
- Start the logger via magnet swipe or pre-program to start at a specific date and time.
- Logging interval as low as 5 second per reading and as high as one day (24 hours).
- User replaceable battery. To replace the battery, simply remove the three screws located on the rear of your logger's case. Carefully pull the front half of the logger away from the back, being careful not to lose the rubber seal located inside the lid, and the three small seals, located on each screw. Replace the battery and seals in correct position. For humidity loggers, **DO NOT** touch the sensors. Seal your logger's case with the three logger screws.

  **Note: Stored readings cannot be lost by removing the battery. However, if you are currently logging, or you need the real-time clock to keep time, it is important that you replace your old battery with a new battery immediately upon removal of the old battery.**

## 3. iLog Display




## 4. Temperature ranges

| Temperature Ranges | °F | °C |
|---|---|---|
| **C** | -4 to +212 | -20 to +100 |
| **D** | -40 to +158 | -40 to +70 |
| **N** | -148 to +104 | -100 to +40 |
| **Z** | 32 to +302 | 0 to +150 |

## 5. iLog Details

| Product Code | Logger Type | Temp Range | Sensor |
|---|---|---|---|
| **EI-HS-D-32-L** | Humidity & Temperature | D | 2 Internal |
| **EI-IN-D-32-L** | Temperature | D | 1 Internal |
| **EI-IN-N-32-L** | Temperature | N | 1 Internal |
| **EI-IN-DN-32-L** | Temperature | D & N | 2 Internal |

| | | | |
|---|---|---|---|
| **EI-1E-D-32-L** | Temperature | D | 1 Internal &1 External |
| **EI-1E-DC-32-L** | Temperature | D & C | 1 Internal &1 External |
| **EI-1E-DN-32-L** | Temperature | D & N | 1 Internal &1 External |
| **EI-1E-DZ-32-L** | Temperature | D & Z | 1 Internal &1 External |
| **EI-2E-C-32-L** | Temperature | C | 2 External |
| **EI-2E-D-32-L** | Temperature | D | 2 External |
| **EI-2E-N-32-L** | Temperature | N | 2 External |
| **EI-2E-Z-32-L** | Temperature | Z | 2 External |
| **EI-2E-DC-32-L** | Temperature | D & C | 2 External |
| **EI-2E-DN-32-L** | Temperature | D & N | 2 External |
| **EI-2E-DZ-32-L** | Temperature | D & Z | 2 External |
| **EI-2E-CN-32-L** | Temperature | C & N | 2 External |
| **EI-2E-CZ-32-L** | Temperature | C & Z | 2 External |
| **EI-2E-NZ-32-L** | Temperature | N & Z | 2 External |

# 6. Connecting your iLog to your PC

- You can connect your iLog logger directly to a CRYOPAK DIGITAL Logger Interface, which is attached to a serial port located on your PC.
- Remember the COM port that the logger was connected to and open your CRYOPAK DIGITAL Console software. To learn how to use our CRYOPAK DIGITAL Console Software, kindly refer to the help file attached to the software or section.

# 7. Installing and using a USB to serial port cable

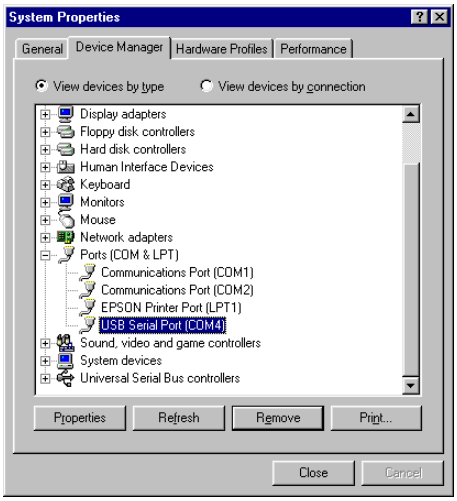
7.1 Close any CRYOPAK DIGITAL software which may be currently running on your machine.

7.2 Open the Device Manager (Click Start, go to Control Panel, choose System, in Hardware tab click on Device Manager) and look up which COM ports are already available.

7.3 Connect a USB to serial port adapter (available from CRYOPAK DIGITAL as JA-USB-SER or at your local electronics store) to a USB port on your computer.

7.4 Do **not** connect the logger interface to the USB cable yet.

7.5 Install the USB to serial port adapter.




- **Windows 10, Windows 8, Windows 7, Windows Vista and Windows XP**: Wait for operating system to recognize the new hardware (USB deviceWait for operating system to recognize the new hardware (USB device).
- **Windows 98 and 2000:** Follow Installation Manual delivered with the adapter.
    - Simplified instructions for JA-USB-SER:
    - Restart your computer.
    - Plug in the USB-Serial cable into the USB port and run the Add New Hardware Wizard (Click Start, go to Control Panel, choose Add Hardware) to assist you in setting up the new device.
    - Insert the USB-Serial cable software driver into the CD-ROM drive and locate the driver on the CD-ROM drive **D:\un8be-a\pc driver** (D: represents CD-ROM).
    - Follow the instructions provided within the provided driver disc.
    - Complete installation using the Add Hardware Wizard.

7.6 See the Device Manager (screenshot on right) to check which number was assigned to the new COM port **USB Serial Port.**

7.7 Connect your iLog logger and interface to your USB serial port adapter.

***Note**: It is not possible to install the USB to serial port cable drivers on thin client workstations. A thin client is a term used to describe a network computer that is designed to interface with a client's server directly. A thin client does not have a hard disk drive, whereas a fat client includes a disk drive.*


Example of a thin client workstation

# 8. Installing CRYOPAK DIGITAL Console

8.1 Download CRYOPAK DIGITAL Console software from our website (www.CryopakDigital.com) or insert your software CD, EA-SWP-CON into your CD/DVD Rom drive.

8.2 Double click econsole_21207pro.exe and follow the on-screen instructions taking you through the installation process. Read the warnings and information carefully.

8.3 Launch CRYOPAK DIGITAL Console.

8.4 Choose the COM port that your iLog is connected to. This dialog appears automatically when you first install CRYOPAK DIGITAL Console. If you have already used Console before, go to the MENU, EDIT, and choose the command OPTIONS. In the “Communication” tab you can select the correct COM port. If you are using a USB to serial port converter you may have to look up the correct COM port number in your “Device Manager”.

- Press WINDOW key “R” together and type **devmgmt.msc**
- Browse to “ports”.

8.5 Select the iLog tick box as one of the CRYOPAK DIGITAL products you want to use. This dialog appears automatically when you first install CRYOPAK DIGITAL Console. If you have already used Console before, go to the Edit menu and choose the command Options. In the Products tab you can select the CRYOPAK DIGITAL products you wish to use and put them into the sequence in which CRYOPAK DIGITAL Console will search for them.

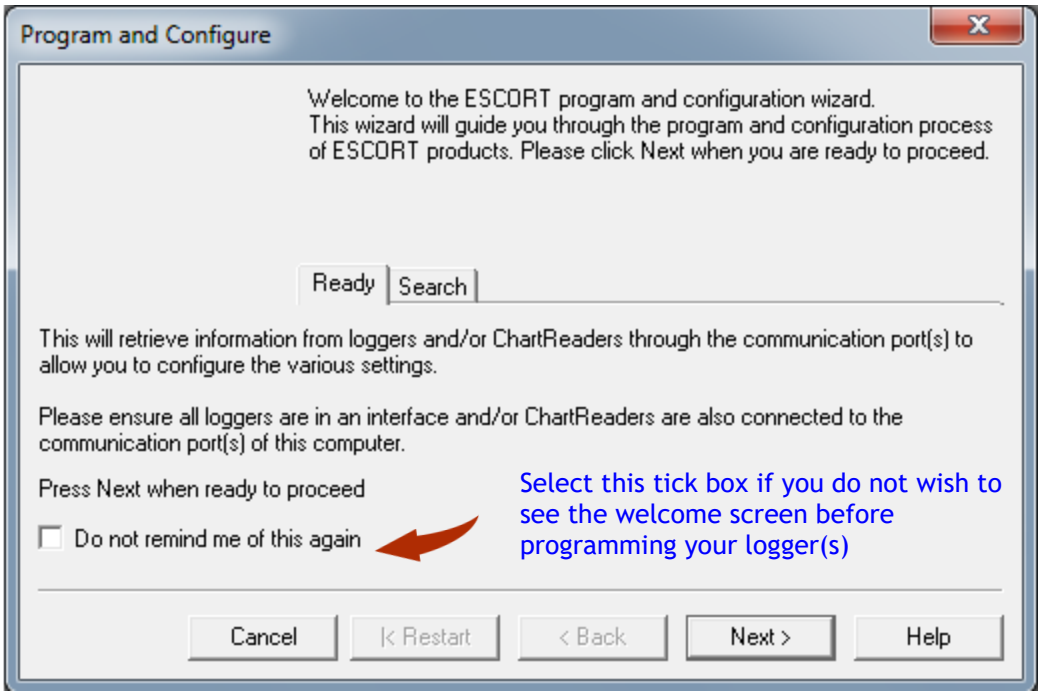
8.6 Read tips of the day. Turn off this feature by ticking the box on the bottom if you do not wish to see those tips in the future.

8.7 The help file is the CRYOPAK DIGITAL user manual. Go to the Help menu and choose the command Help Topics. If you use CRYOPAK DIGITAL products for the first time, have a look at the “Quick Start Guide” in the Common Topics.

# 9. Programming your iLog data logger

- Launch CRYOPAK DIGITAL Console.
- Connect your iLog to an CRYOPAK DIGITAL interface and ensure the correct COM port is selected in Console.
- From the Action menu, select the ‘Program and Configure’ command.
- Follow the on-screen instructions.

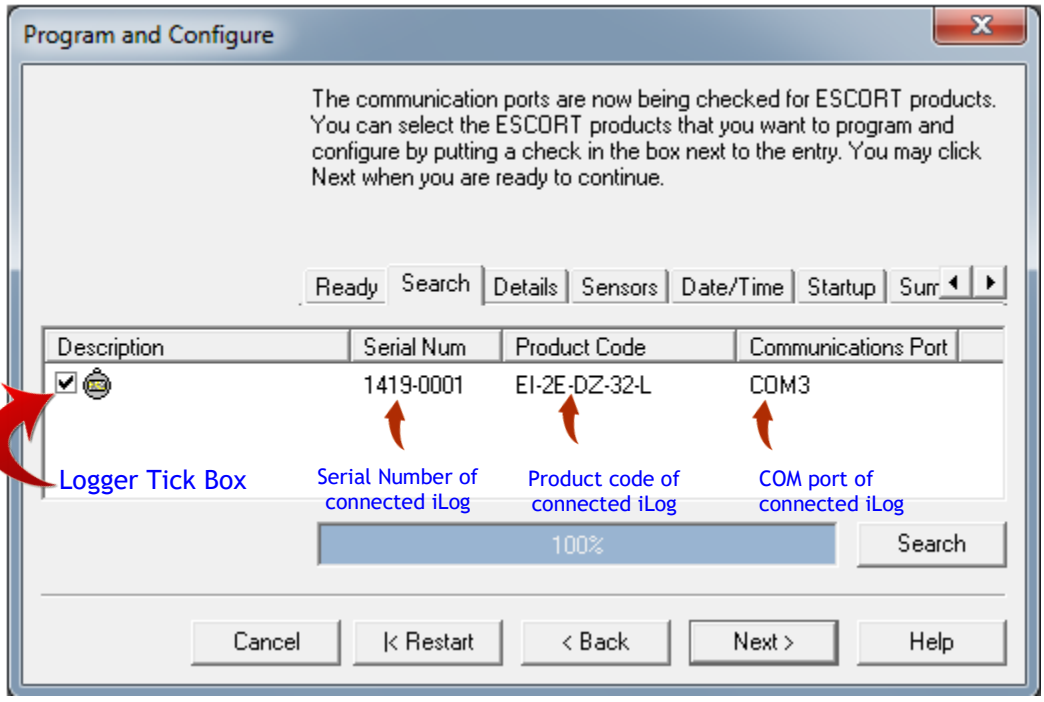
Once you have opened the ‘Program and Configure’ wizard a welcome screen will appear (see figure below). If you do not wish to see this message when downloading future loggers, select the ‘Do not remind me of this again’ tick box, located at the bottom left of the screen, followed by the ‘Next’ button (see figure below).




**'Program and Configure – Welcome' window**

The 'Program and Configure' wizard will display the following window (see figure below). If your iLog logger cannot be programmed the logger tick box (located below the description heading) will not be checked and you will not be able to proceed. If your logger is password-protected, you will be prompted for the password upon selecting the tick box.

To proceed to the next stage of the 'Program and Configure' wizard select the next button located at the bottom of the wizard window.



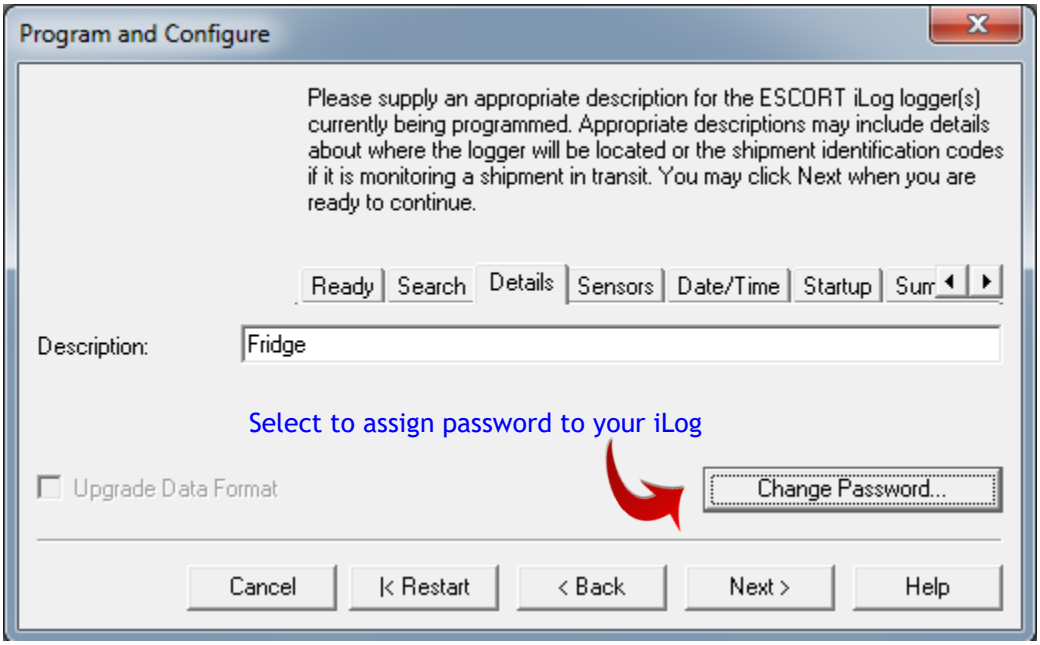

**Program and Configure Search Window**

# 10. Description & Passwords

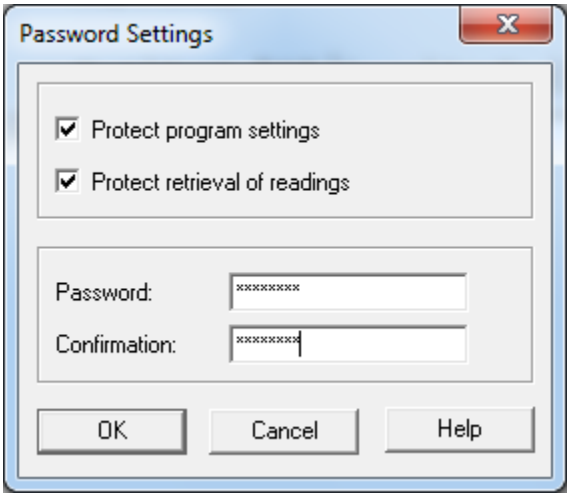
The ‘Details’ window allows for the assignment of a unique logger description for easy logger identification and the ability to assign a password to your iLog logger (see figure below).

To assign a password click the ‘Change Password’ button located at the bottom right of the ‘Program and Configure Details’ window (see figure 1.6 below). The ‘Password Settings’ window will appear (as shown). Here you are given two options, the ‘Protect program settings’ option, which provides for the protection of the programming settings you have issued for you logger. The second option is the ‘Protect retrieval of readings’ option, which disallows individuals from viewing information downloaded from your logger without a password.

Once you have selected the password protect options you require and have entered and confirmed your password select the ‘OK’ button. Once you have entered a description and password (if required) select the ‘Next’ button.




**Program and Configure Details Window**




Password options – Tick to select

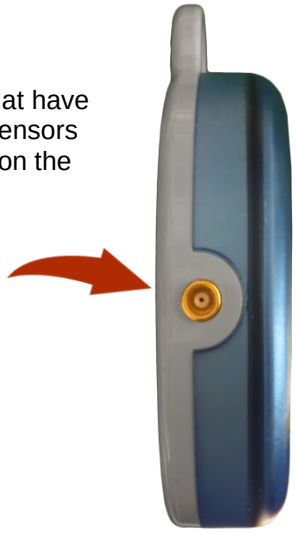
8 digits alphanumeric

**Password Settings Window**

# 11. Connecting a sensor

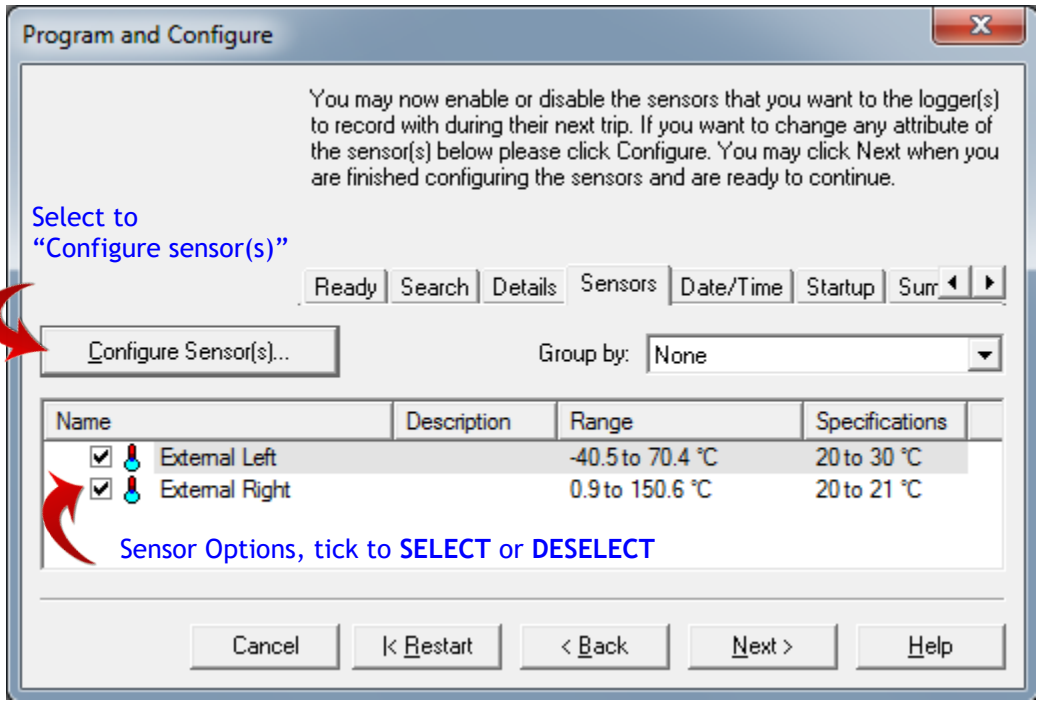
iLog loggers have internal and external sensor options. The models of iLog that have external sensor options are shown in section 4. Users can connect external sensors to their iLog by inserting the sensor connector into the sensor socket located on the left and/or the right side(s) of the logger (as shown).

iLog sensor connecting socket. Insert sensor connector to add sensor to your iLog logger



# 12. Configuring logger sensors

Following the 'Details' window is the 'Sensors' window, which allows for the selection and configuration of you iLog's sensor(s). All the sensors attached to your logger will be automatically selected, if you do not wish to use a particular sensor for any reason, simply deselect the tick box located to the left of the sensor's icon (as shown below).

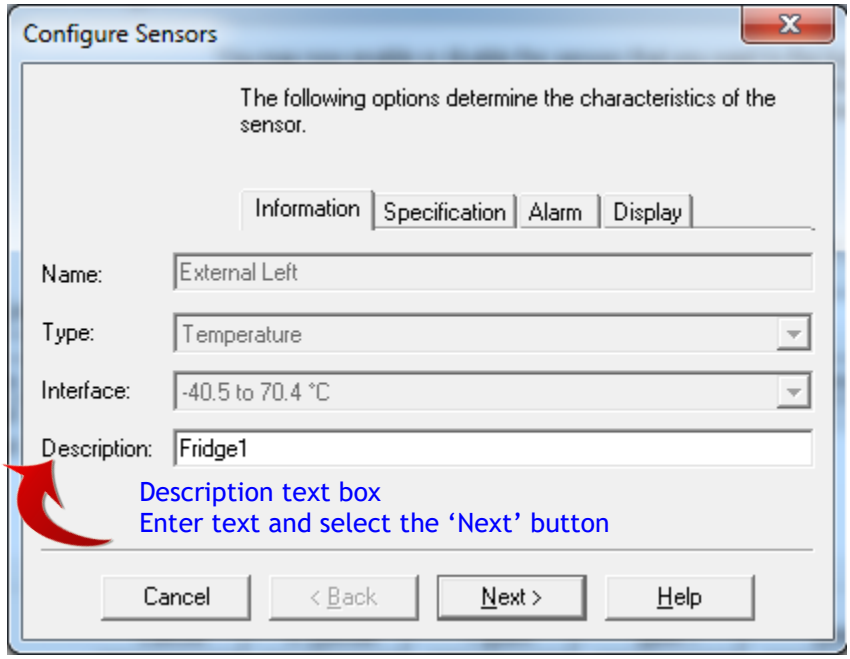



**Program and Configure Sensors Window**

If you wish to configure your logger's sensor(s), simply highlight the appropriate sensor(s), and select the Configure Sensor(s) button located in the top left corner of the 'Program and Configure' window. To select multiple sensors, hold the control key (located on your computers keyboard) down and select the appropriate sensors.

Once you have selected the 'Configure Sensor(s) button, a new screen will appear that allows you to add and alter the different features relating to each of your loggers' sensors.

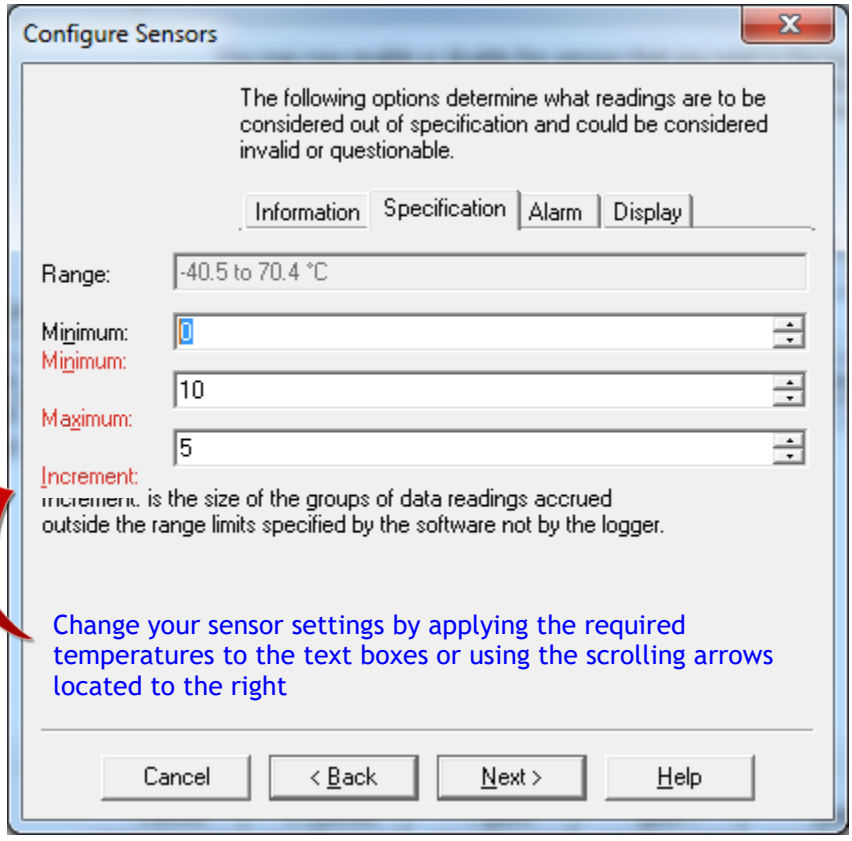
The first window to appear is the 'Configure Sensors - Information' window (see figure 1.10), which supplies specific information relating to you logger and allows for the addition of logger description for easy logger identification.




**'Configure Sensors – Information' window**

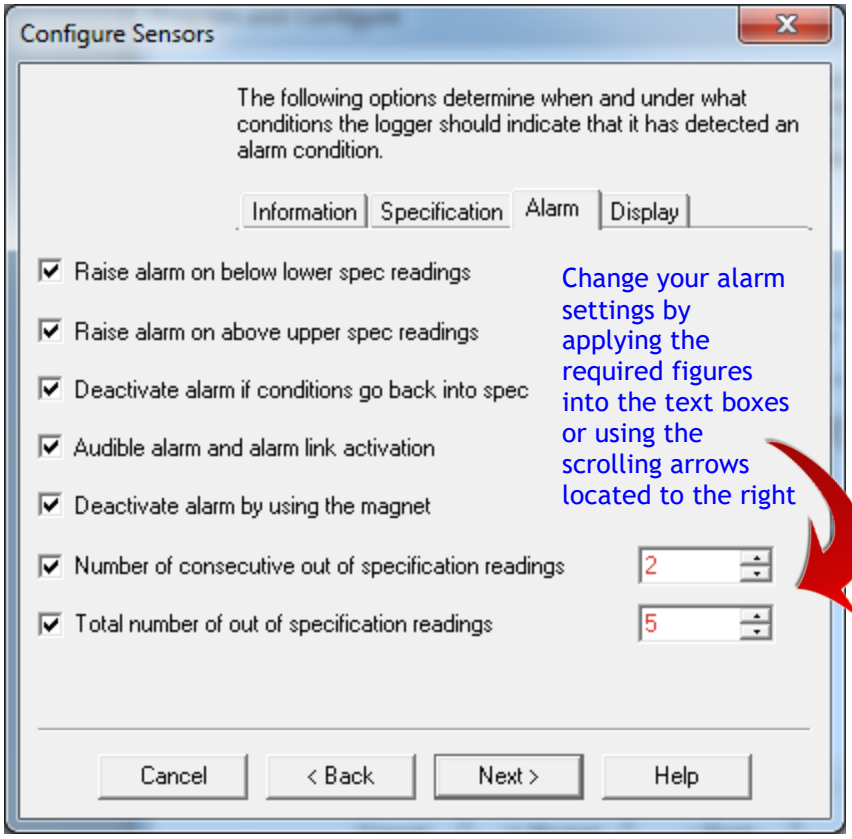
Once you have entered a description and checked your sensor(s) information, click the 'Next' button.

The second window displayed is the 'Configure Sensors – Specification' window (as shown). This window provides you with the ability to add and adjust your sensor(s) out of specification settings and the increment in which your CRYOPAK DIGITAL Console software will display changes in your logger readings.




**'Configure Sensors – Specification' window**

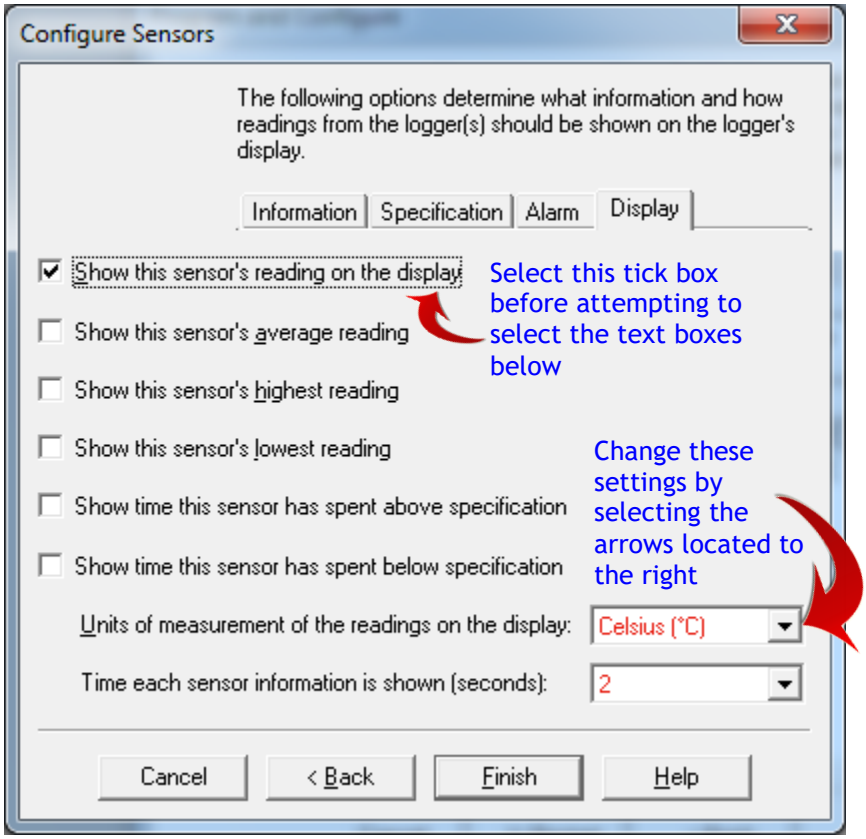
The third window is the 'Configure Sensors – alarm' window (as shown). You can select a series of different option relating to your sensor(s) alarm settings by selecting the corresponding tick box. If you wish to alter the number of out of specification readings or consecutive readings out of specification that a logger records before generating an alarm, simply select the appropriate tick box and enter the required number into the text box provided or use the scrolling arrows located to the right of the text box.




**'Configure Sensors – Alarm' window**

The fourth window is the 'Configure Sensors – Display' window (as shown). This widow provides you with the ability to activate or restrict the information displayed on your loggers screen. To alter your logger display settings, first ensure that you have selected the 'Show this sensor's readings on display' tick box.

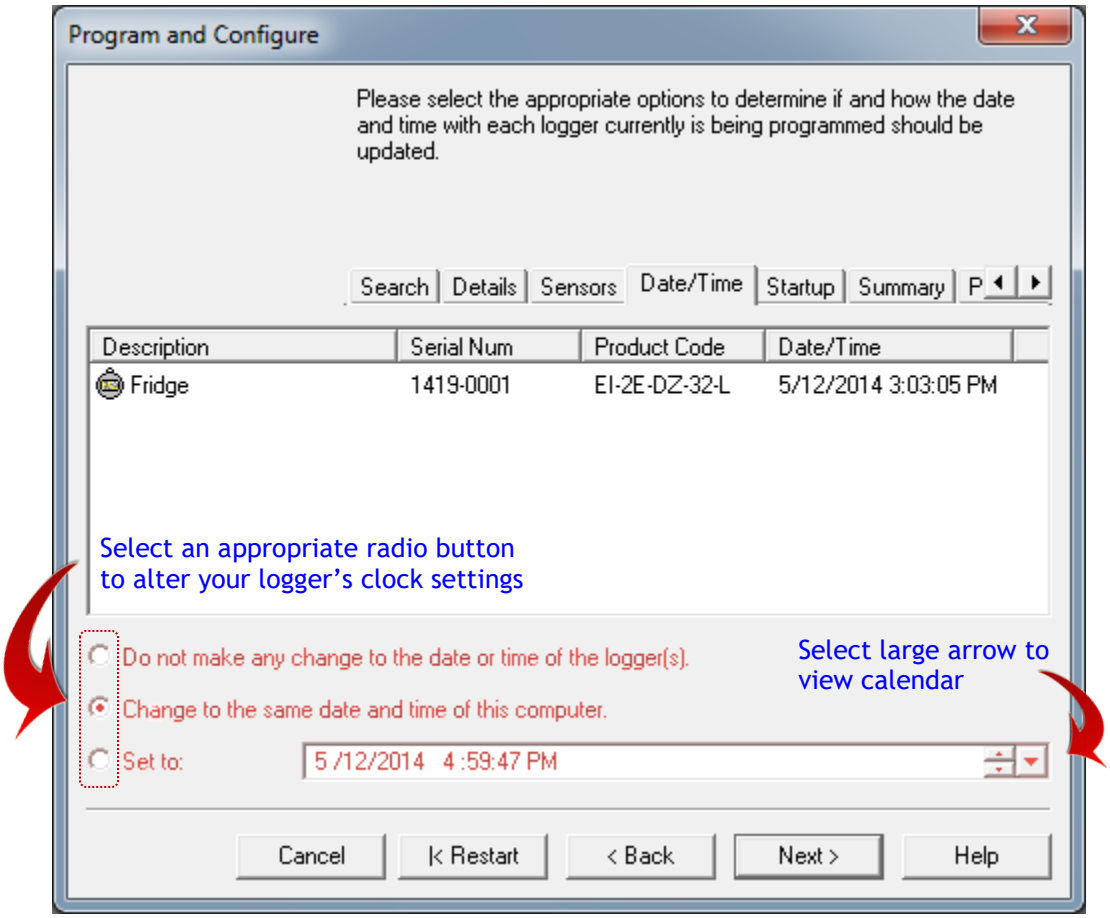
You also have the ability to select the unit of temperature you would prefer and the number of seconds that your logger will pause for before advancing to the next display setting. Once you have selected the combination of logger settings that wish to view, select the 'Finish' button.




**'Configure Sensors – Display' window**

# 13. Setting a date and time

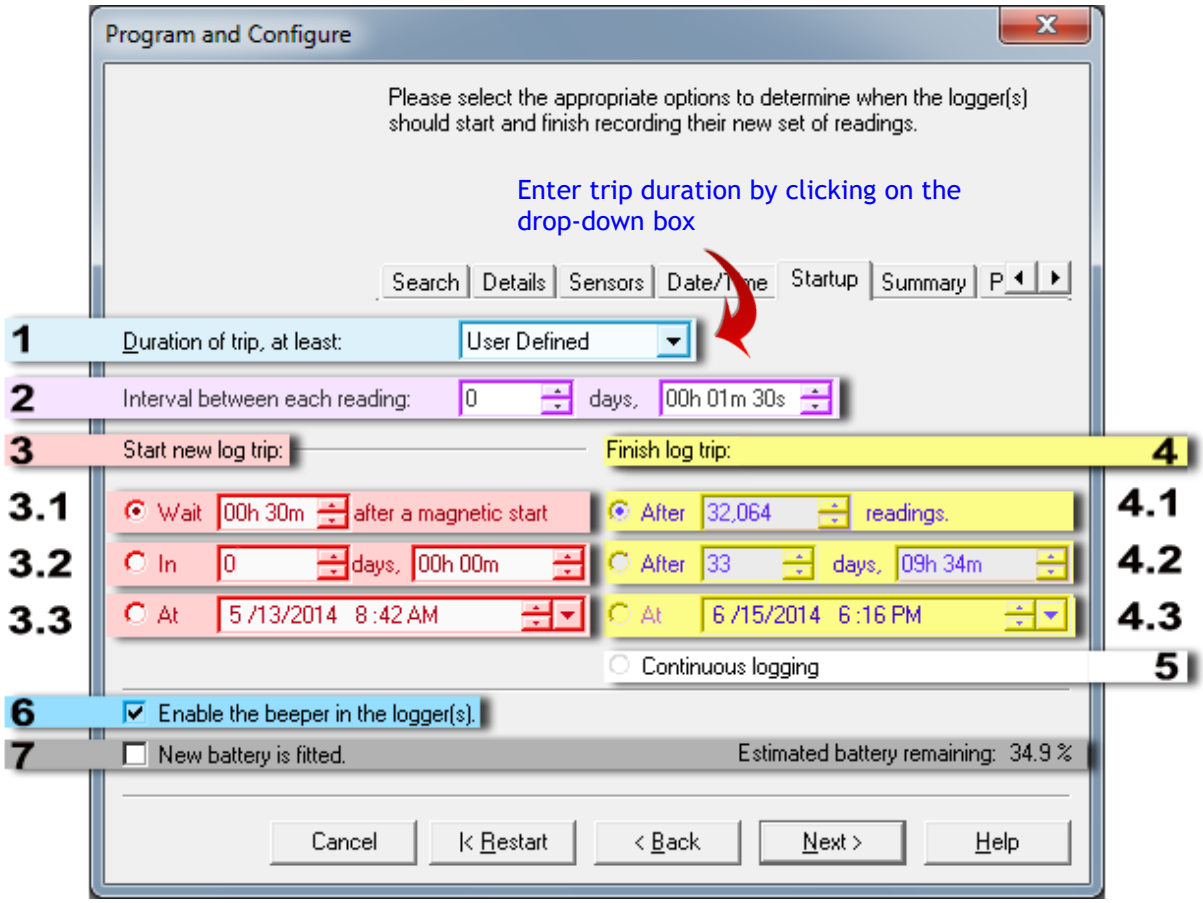
Following the ‘Sensors’ window is the ‘Date/Time’ window (as shown below), which allows for the selection and configuration of you iLog’s clock settings. You are given three options; the first allows you to simply keep your loggers current clock settings. The second option is the recommended option and updates your logger with you computers current clock settings. The final option allows you to manually enter a date and time for your logger. To manually change your clock settings, simply select the scrolling arrow keys. Alternatively, if you select the larger arrow to the left of the scrolling arrow keys, a calendar will appear, allowing you to simply select the date that you require.




**‘Program and Configure - Date/Time’ window**

# 14. Setting start conditions

Following the ‘Date/Time’ window is the ‘Start-up’ window (as shown below), which allows for the selection and configuration of you iLog’s start-up settings. This window allows users to enter a logger’s trip duration from 0 to 60 days, define your loggers recording intervals (1 hour to 10 days), enter your logger start conditions (magnetic start, or programmed start), enter your logger finish date and time, select whether you require continuous background logging and provides the ability to enable the beeper within the logger.



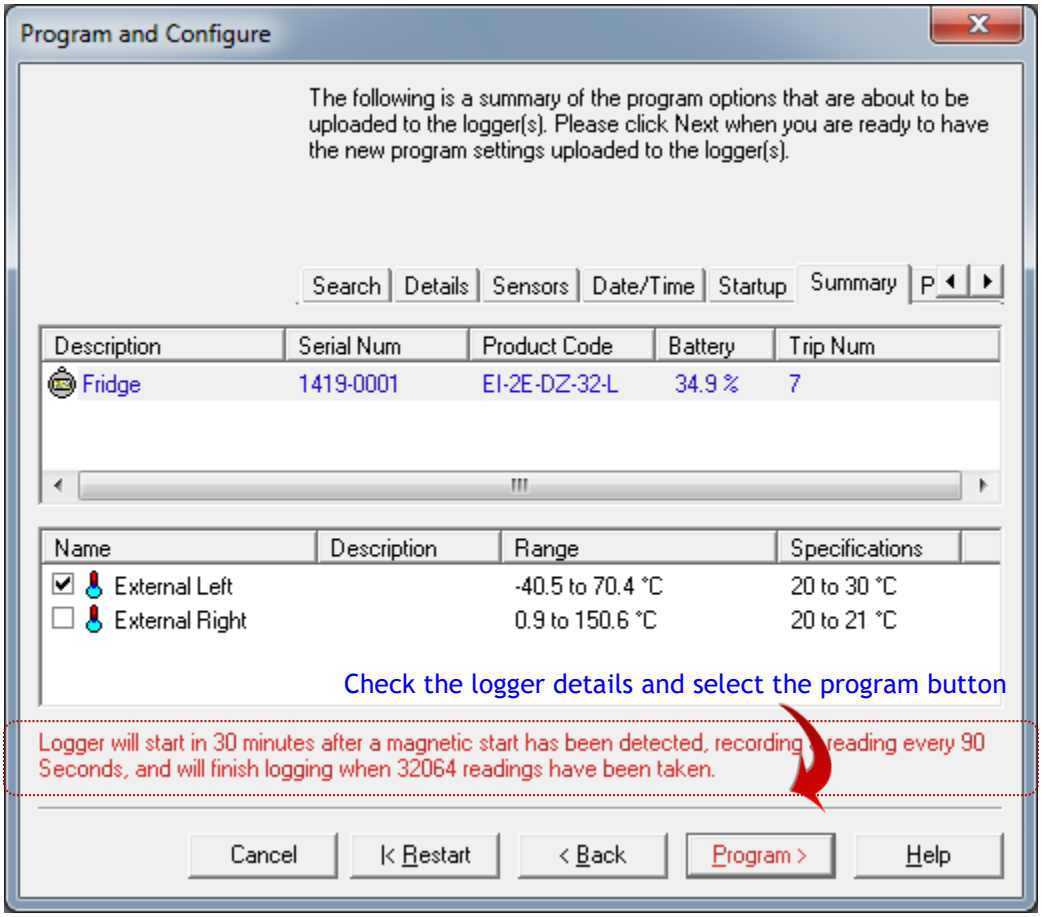

**'Program and Configure – Start-up' window**

| | Option | Information | Remarks |
|---|---|---|---|
| 1 | Duration of trip, at least | User can select pre-defined settings by selecting this option, this option auto selects maximum no. of readings and nearest possible interval. | Other settings can be altered as well even this option is selected. |
| 2 | Interval between each reading | User can select by scrolling with little arrow button or manual entering the value. | Minimum interval supported is 5 sec. |
| 3 | Start new log trip | Setting to start the logger - three options available. | Only one option out of three can be selected. |
| 3.1 | With magnetic key | User can set a start delay, if needed (after magnetic start). | Maximum delay 255 minute. |
| 3.2 | Start after certain time | Enter the duration after how long logger need to be started logging. | Minimum value is 1 min. |
| 3.3 | Start at exact time | Enter exact date and time when logger need to be started recording. | Do not set value higher than 9999 minutes. |
| 4 | Finish log trip | Select an option when you want the logger to stop recording. | 4.3 will only be enabled if 3.3 is selected. |
| 4.1 | After no. of readings | Enter total number of readings to be taken, before the logger stops. | Maximum 32064 readings (16032 each sensor for two sensor logger). |
| 4.2 | Stop after certain time | Enter the duration after how long logger need to be started logging. | |

| | Option | Information | Remarks |
|---|---|---|---|
| 4.3 | Start at exact time | Enter exact date and time when logger need to be stop recording. | 4.3 will only be enabled if 3.3 is selected. |
| 5 | Continuous logging | To use the logger non-stop (wrap around), once the memory is full, it will erase first records and so on. | If stored data is critical do not select this option, data will be erased automatically when memory is full. |
| 6 | Enable beeper | If audible beep is needed. Logger beeps when taking a reading and regularly when there is an alarm. | |
| 7 | New battery | Only select this option if a new battery is fitted. | It will reset battery % counter. |

# 15. Logger summary

Following the 'Start-up' window is the 'Summary' window (see figure 1.16), which provides a summary of you iLog's start-up settings. Once you have checked that your logger's settings are correct, simply click the 'Program' button.

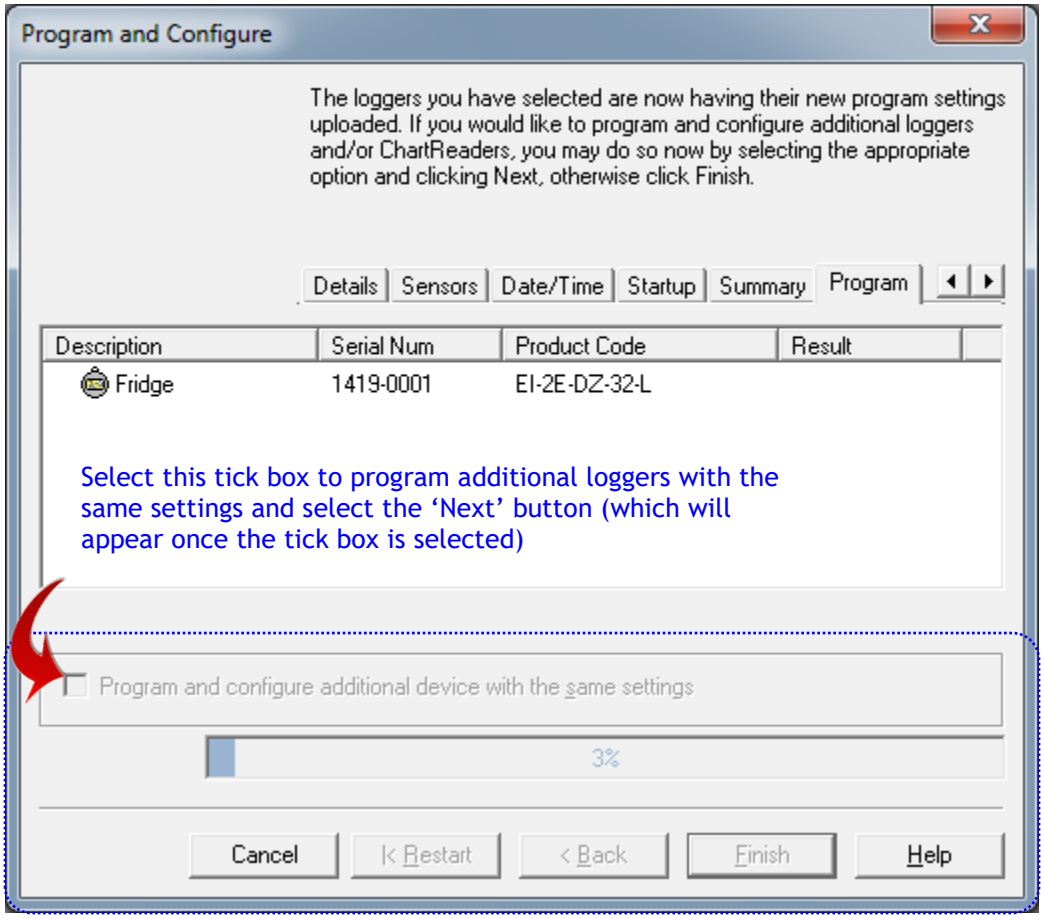


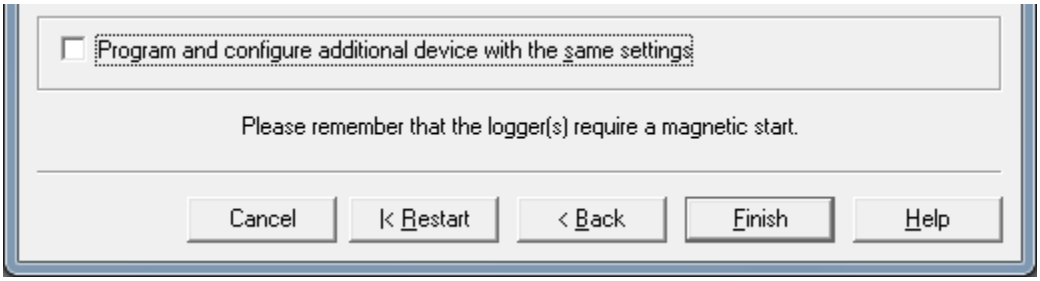

**'Program and Configure – Summary' window**

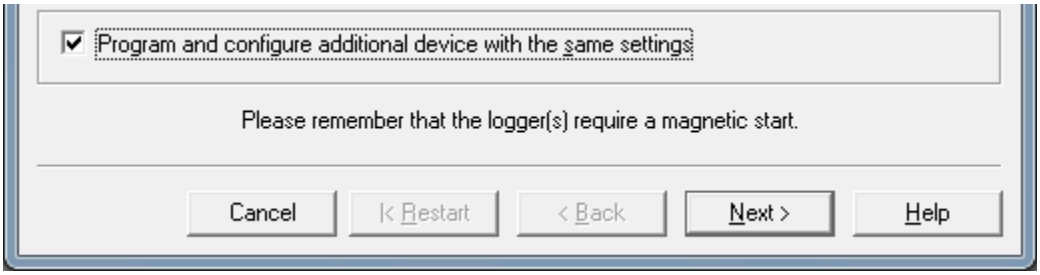
# 16. Program window

The final window to be displayed is the ‘Program’ window, which is simply an indication that your updated logger settings are being uploaded into your iLog logger’s memory. Once your logger has been programmed the ‘Program and Configure’ wizard will allow you to program additional loggers with the same settings. To do this simply click the ‘Program and Configure addition devices with the same settings’ tick box located at the bottom left of the window and select the ‘Next’ button (which will appear after the tick box has been selected).

**‘Program and Configure – Program’ window**



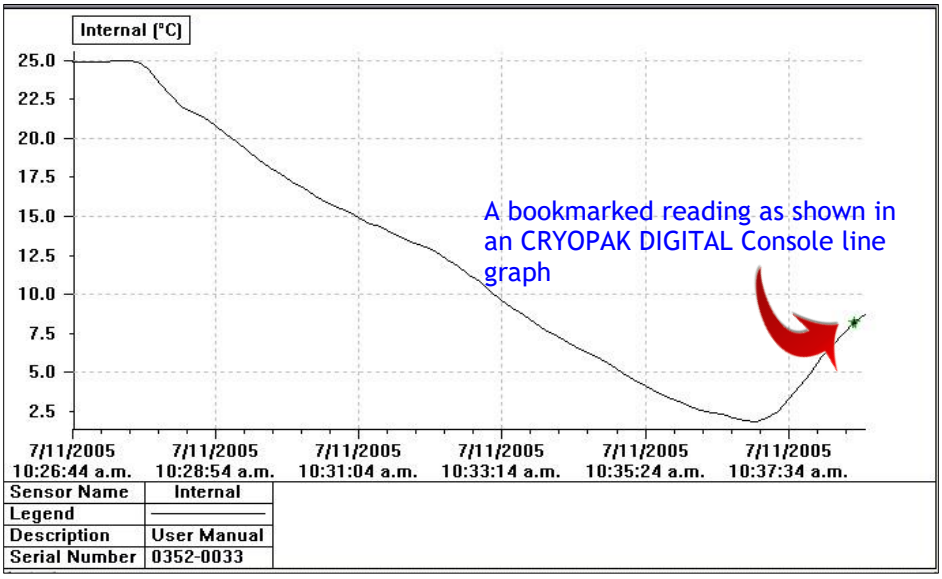



# 17. Bookmarking

A bookmark is an identification method used to locate a place or time when an action has taken place. iLog users have the ability to 'bookmark' logger readings by swiping a magnet over the iLog's label. Once your iLog is downloaded, your CRYOPAK DIGITAL Console software will highlight bookmarked readings using the colour green (see figure 1.19).

A bookmarked reading as shown in an CRYOPAK DIGITAL Console readings report

| Index | Elapsed Time | Date | Time | Internal (°C) |
|---|---|---|---|---|
| 63 | 620 | 7/11/2005 | 10:37:04 a.m. | 1.8 |
| 64 | 630 | 7/11/2005 | 10:37:14 a.m. | 2.1 |
| 65 | 640 | 7/11/2005 | 10:37:24 a.m. | 2.5 |
| 66 | 650 | 7/11/2005 | 10:37:34 a.m. | 3.3 |
| 67 | 660 | 7/11/2005 | 10:37:44 a.m. | 4.1 |
| 68 | 670 | 7/11/2005 | 10:37:54 a.m. | 4.9 |
| 69 | 680 | 7/11/2005 | 10:38:04 a.m. | 6.0 |
| 70 | 690 | 7/11/2005 | 10:38:14 a.m. | 6.7 |
| 71 | 700 | 7/11/2005 | 10:38:24 a.m. | 7.5 |
| 72 | 710 | 7/11/2005 | 10:38:34 a.m. | 8.2 |
| 73 | 720 | 7/11/2005 | 10:38:44 a.m. | 8.8 |
| Out Of Specification | | | | 12 Minutes |
| | | | | 10 Seconds from 1.8 to 1.8 |
| | | | | 10 Seconds from 1.9 to 1.9 |
| | | | | 20 Seconds from 2.1 to 2.1 |
| | | | | 10 Seconds from 2.3 to 2.3 |
| | | | | 10 Seconds from 2.4 to 2.4 |
| | | | | 10 Seconds from 2.4 to 2.5 |



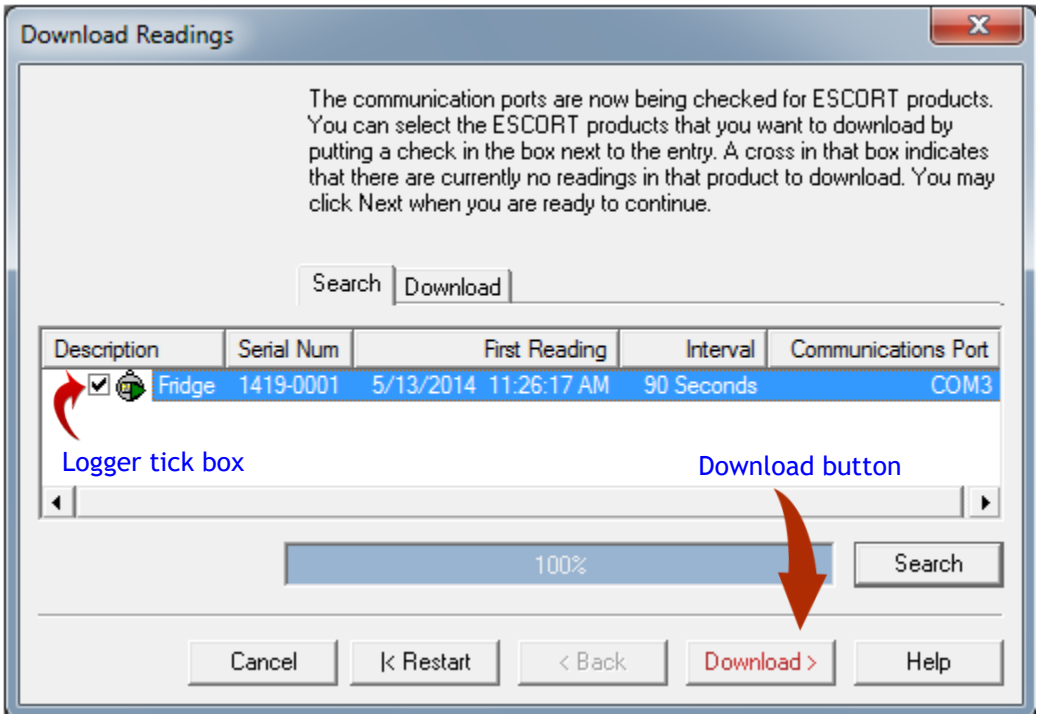
# 18. Downloading your iLog logger

- Launch CRYOPAK DIGITAL Console.
- Connect your iLog to your CRYOPAK DIGITAL interface and ensure the correct COM port is chosen in Console.
- In the Action menu, choose the 'Download' command.
- Follow the on-screen instructions (see below).

# 19. Commencing Download

The first window to be displayed in the 'Download' wizard is called the 'search' window, and displays a task bar which simulates that a logger search is taking place. Once a logger is located the following screen will appear. If your logger has been recording and has information saved within its memory a tick box will be checked to the left of the iLog icon. If the tick box is not checked this indicates that your logger has no recorded information within its memory, your logger is unable to be downloaded, or your logger is password protected. If your iLog logger is password protected please refer to the relevant password information located on page ten and eleven of this user manual.

To proceed to the next stage of the 'Download' wizard, select the next button located at the bottom of the window.

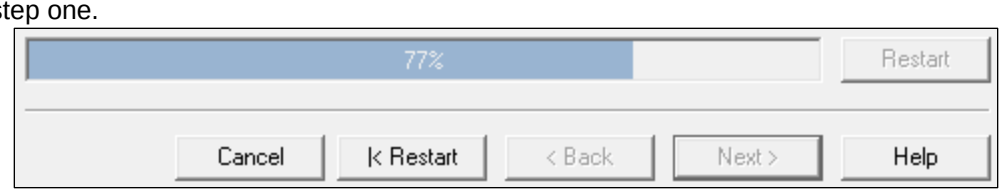



**'Download – Search' window**

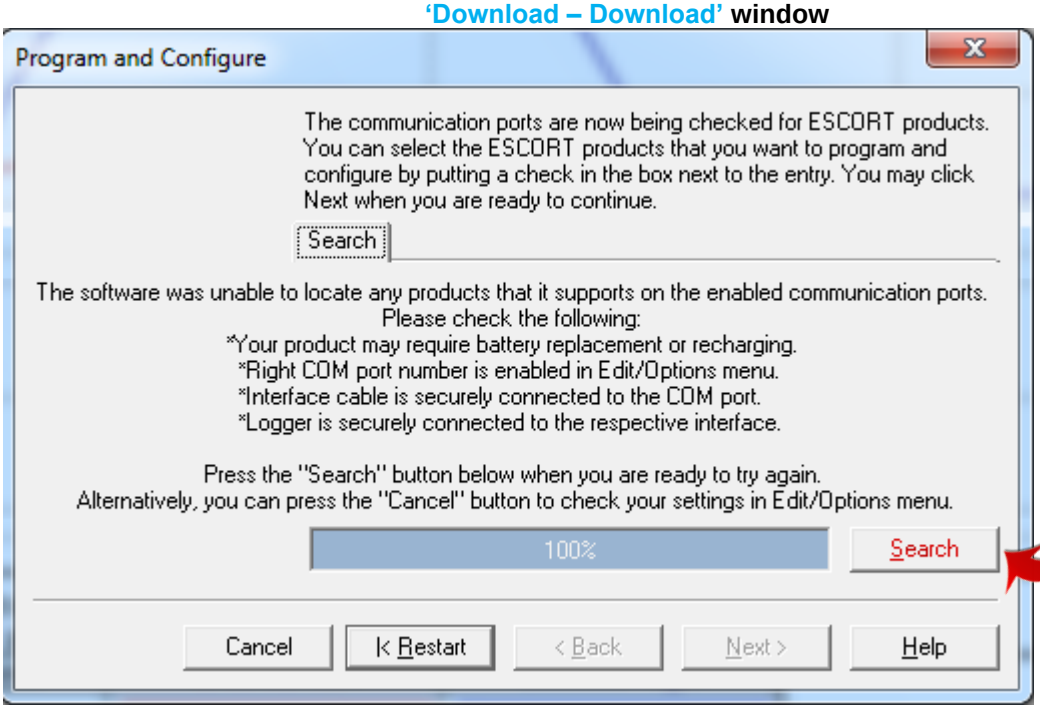
# 20. Download Readings

The second window to be displayed in the 'Download' wizard is called the 'download' window, and displays a task bar which simulates that a logger download is taking place (see figure below). Once the wizard has successfully downloaded your logger the 'Next' button located at the button of the window will

become available, simply select the ‘Next button to proceed. If a logger download is unsuccessful, the following window will appear (see figure 2). If this occurs, simply click the search button (see figure 2) or return to step one.




**‘Download – Download’ window**



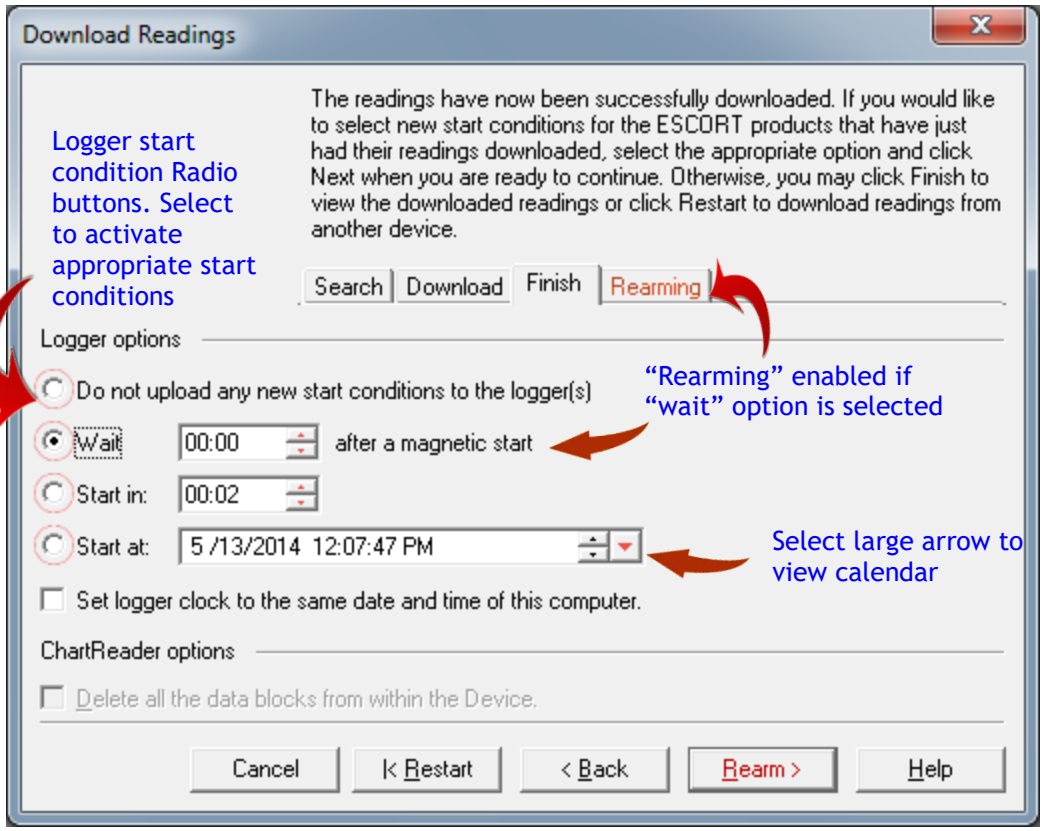

Select the search button to reattempt logger download

Figure 2 - **‘Download – Unsuccessful search’ window**

# 21. Logger summary and start conditions

The fourth window to be displayed in the ‘Download’ wizard is called the ‘Finish’ window. This window allows for start conditions to be added to your logger once your loggers download is complete (see figure below). To change your logger settings select the appropriate radio button located to left of the ‘Download’ window (below the heading ‘Logger options’). If the start setting requires specific date and/or time, simply use the scrolling arrows located to the right of the appropriate text box (as shown below). Once you have assigned the appropriate start conditions to your logger select the ‘Rearm’ button.

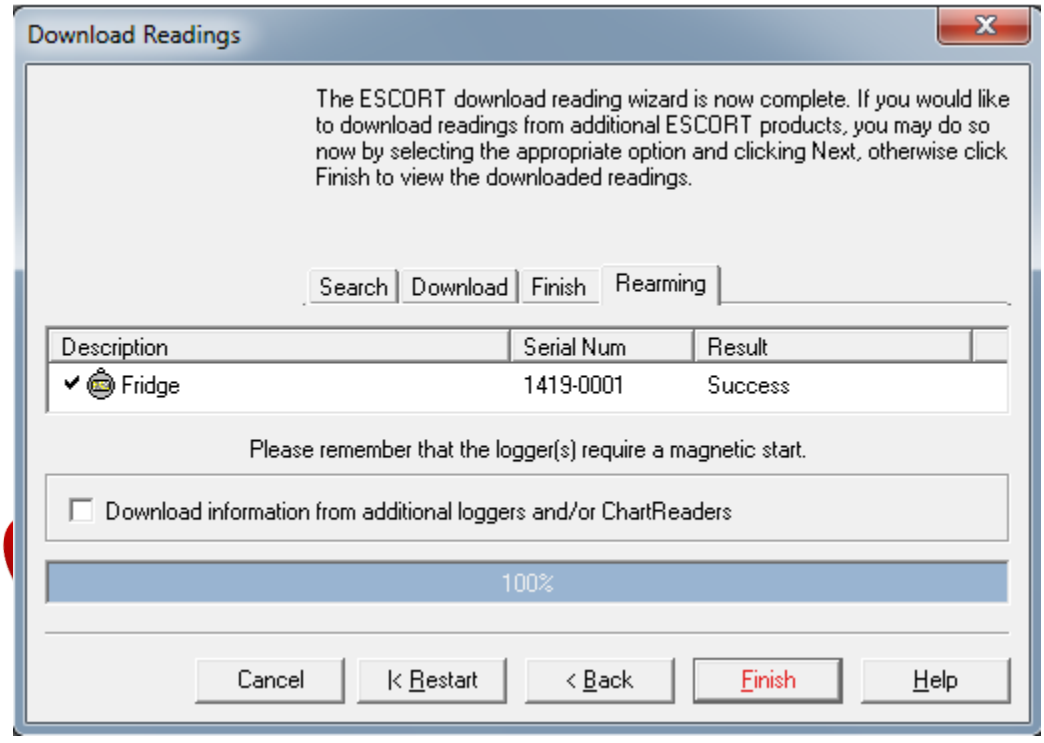
If you would prefer not to interrupt your loggers recording cycle please select the ‘Do not upload any new start conditions to the logger(s) radio button.




**'Download – Finish' window**

## 22. Rearming your iLog

If you choose to rearm the logger, the final screen to be displayed within the 'Download' wizard is the 'Rearm' window (see figure below). This window is helpful when you have more than one logger to download. To use this function select the 'Download information for additional Loggers and/or ChartReaders tick box and select the next button. You will then repeat steps one through four.

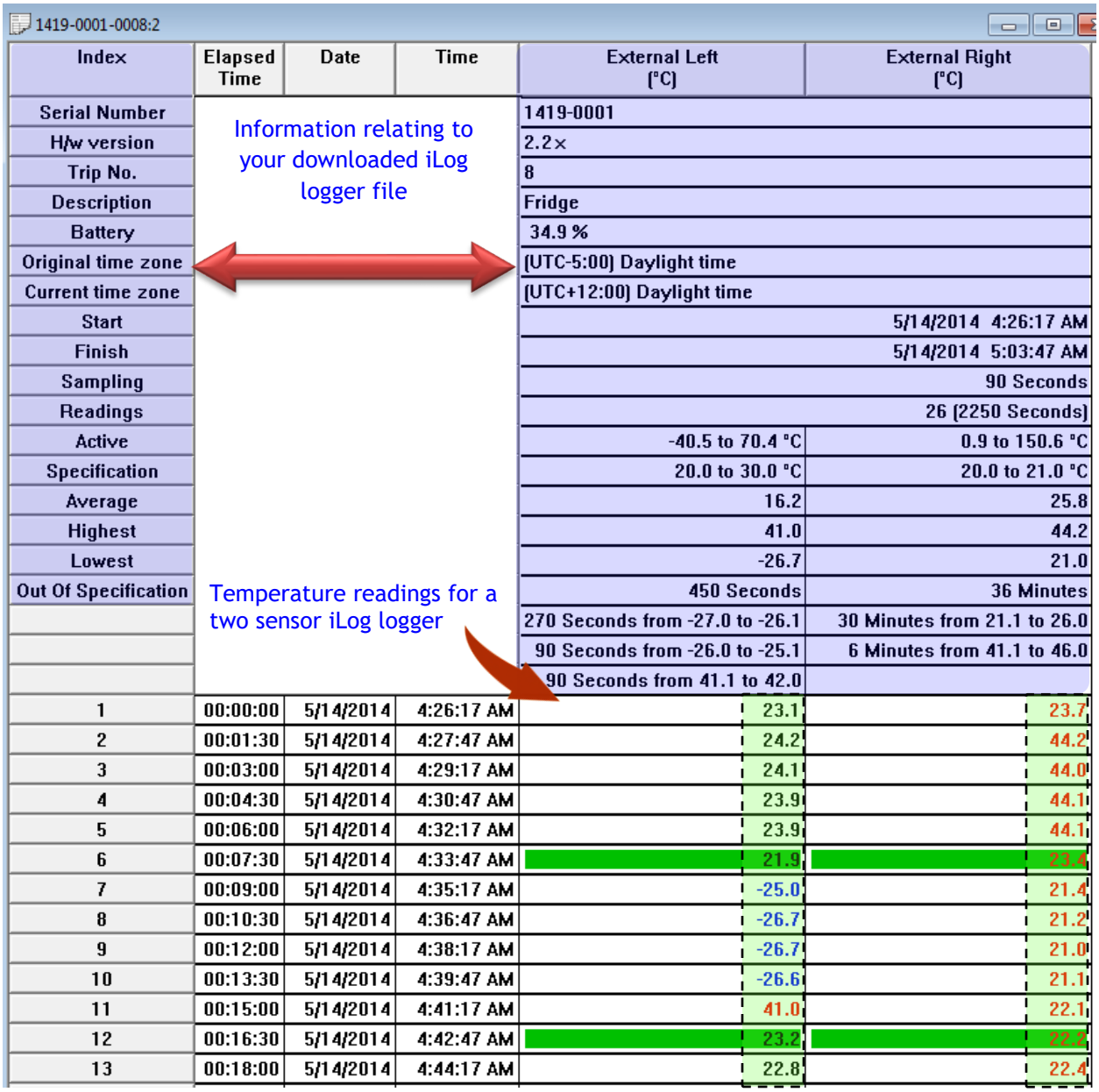



**'Download – Rearm' window**

"Finish" will turn into "Next" to proceed programming another attached

# 23. Analysing your downloaded information

Once downloaded using CRYOPAK DIGITAL Console, the data saved within your iLog logger will be displayed as a reading's summary. Within this summary you are able to view the following information; your logger's serial number, hardware version, trip number, your loggers description (if assigned), battery status, the time zones with which your logger was programmed and downloaded, the time your logger started and finished logging, your loggers sampling interval, the number of readings recorded, the temperature range it recorded within, the alarm limits and the highest, lowest and average readings.




| Index | Elapsed Time | Date | Time | External Left (°C) | External Right (°C) |
|---|---|---|---|---|---|
| Serial Number | | | | 1419-0001 | |
| H/w version | | | | 2.2x | |
| Trip No. | | | | 8 | |
| Description | | | | Fridge | |
| Battery | | | | 34.9 % | |
| Original time zone | | | | (UTC-5:00) Daylight time | |
| Current time zone | | | | (UTC+12:00) Daylight time | |
| Start | | | | | 5/14/2014 4:26:17 AM |
| Finish | | | | | 5/14/2014 5:03:47 AM |
| Sampling | | | | | 90 Seconds |
| Readings | | | | | 26 (2250 Seconds) |
| Active | | | | -40.5 to 70.4 °C | 0.9 to 150.6 °C |
| Specification | | | | 20.0 to 30.0 °C | 20.0 to 21.0 °C |
| Average | | | | 16.2 | 25.8 |
| Highest | | | | 41.0 | 44.2 |
| Lowest | | | | -26.7 | 21.0 |
| Out Of Specification | | | | 450 Seconds | 36 Minutes |
| | | | | 270 Seconds from -27.0 to -26.1 | 30 Minutes from 21.1 to 26.0 |
| | | | | 90 Seconds from -26.0 to -25.1 | 6 Minutes from 41.1 to 46.0 |
| | | | | 90 Seconds from 41.1 to 42.0 | |
| 1 | 00:00:00 | 5/14/2014 | 4:26:17 AM | 23.1 | 23.7 |
| 2 | 00:01:30 | 5/14/2014 | 4:27:47 AM | 24.2 | 44.2 |
| 3 | 00:03:00 | 5/14/2014 | 4:29:17 AM | 24.1 | 44.0 |
| 4 | 00:04:30 | 5/14/2014 | 4:30:47 AM | 23.9 | 44.1 |
| 5 | 00:06:00 | 5/14/2014 | 4:32:17 AM | 23.9 | 44.1 |
| 6 | 00:07:30 | 5/14/2014 | 4:33:47 AM | 21.9 | 23.4 |
| 7 | 00:09:00 | 5/14/2014 | 4:35:17 AM | -25.0 | 21.4 |
| 8 | 00:10:30 | 5/14/2014 | 4:36:47 AM | -26.7 | 21.2 |
| 9 | 00:12:00 | 5/14/2014 | 4:38:17 AM | -26.7 | 21.0 |
| 10 | 00:13:30 | 5/14/2014 | 4:39:47 AM | -26.6 | 21.1 |
| 11 | 00:15:00 | 5/14/2014 | 4:41:17 AM | 41.0 | 22.1 |
| 12 | 00:16:30 | 5/14/2014 | 4:42:47 AM | 23.2 | 22.2 |
| 13 | 00:18:00 | 5/14/2014 | 4:44:17 AM | 22.8 | 22.4 |

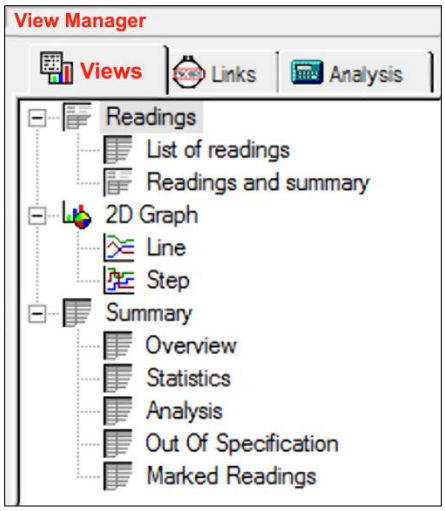
**Downloaded file "Reading & Summary" view**

Below the information relating to your loggers you will see each individual reading which was saved within your logger, the date and time the reading was recorded, bookmarked readings (if recorded) and if your logger has more than one sensor attached, you will see the readings displayed adjacent to each other.

# 24. Viewing downloaded information

Your CRYOPAK DIGITAL Console software provides the ability to view your iLog logger data in several different formats. These formats are; Readings (list of readings and readings and summary), 2D graph (line and step) and summary (overview, statistics, analysis and out of specification). You are able to access the different views by selecting (double click to select) from the views menu located on the left of your Console window.

The different views available in ESCORT Console software




**View Manager Different views**

## 24.1 List of Readings

The first option under the readings menu is the list of readings menu option. This option displays a list of your loggers reading in their entirety. If you have an iLog with two sensors, Console will display your logger's readings side by side.

Console displays -
Reading number,
Elapsed time,
Date,
Time of reading and
Temperature and / or
Humidity readings

1229-0204-0011-hum with iMINI:2

| Index | Elapsed Time | Date | Time | Air Temp (°C) | Humidity (%RH) |
|---|---|---|---|---|---|
| 1 | 00:00:00 | 9/29/2012 | 3:40:33 AM | 23.2 | 52.2 |
| 2 | 00:00:10 | 9/29/2012 | 3:40:43 AM | 23.3 | 55.3 |
| 3 | 00:00:20 | 9/29/2012 | 3:40:53 AM | 23.3 | 56.5 |
| 4 | 00:00:30 | 9/29/2012 | 3:41:03 AM | 23.3 | 51.8 |
| 5 | 00:00:40 | 9/29/2012 | 3:41:13 AM | 23.2 | 63.2 |
| 6 | 00:00:50 | 9/29/2012 | 3:41:23 AM | 23.2 | 60.5 |
| 7 | 00:01:00 | 9/29/2012 | 3:41:33 AM | 23.2 | 60.4 |

**View Manager List of Readings**

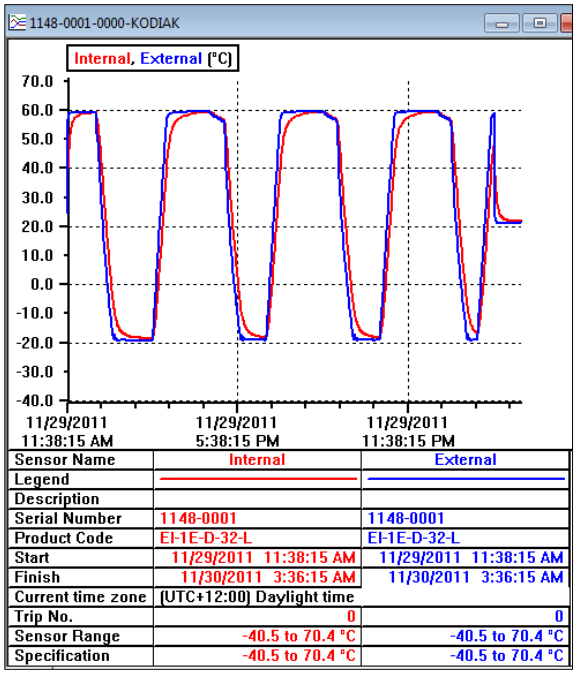
## 24.2 Readings and Summary

The second option under the readings menu is the readings and summary menu option. This is the default menu option and displays all the information mentioned in the analysing your downloaded information in section 23

**Note:** User can always set the "default view"; by right click to an option and setting to default. Next time when a file is downloaded it will display in that view

## 24.3 2D LINE GRAPH

The first menu option under the 2D Graph menu is the line graph menu option. Here your logger data is displayed in an easy to view format, with each sensor displayed in different colours and if required your above/below specification limits and calibration limits are marked in different colours. To customise the way in which you view your graphs please refer to the help files supplied with your Console software.

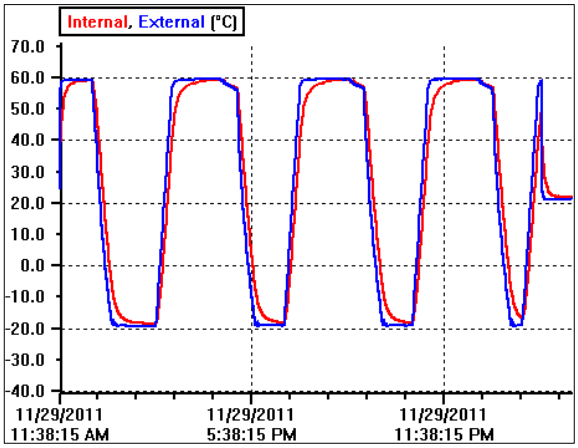



| Sensor Name | Internal | External |
|---|---|---|
| Legend | | |
| Description | | |
| Serial Number | 1148-0001 | 1148-0001 |
| Product Code | EI-1E-D-32-L | EI-1E-D-32-L |
| Start | 11/29/2011 11:38:15 AM | 11/29/2011 11:38:15 AM |
| Finish | 11/30/2011 3:36:15 AM | 11/30/2011 3:36:15 AM |
| Current time zone | (UTC+12:00) Daylight time | |
| Trip No. | 0 | 0 |
| Sensor Range | -40.5 to 70.4 °C | -40.5 to 70.4 °C |
| Specification | -40.5 to 70.4 °C | -40.5 to 70.4 °C |

**View Manager** Line Graph

## 24.4 STEP GRAPH

The second menu option under the 2D Graph menu is the step graph menu option. This format is similar to that of the line graph format except that changes in the readings are shown as a line as opposed to smooth lines.




**View Manager** Step Graph

## 24.5 SUMMARY OVERVIEW

The first menu option under the Summary menu is the Overview menu option. This menu option provides the basic information relating to your downloaded logger file, such as; your logger's serial number, hardware (firmware) version, logger description, battery status, time zone information, start and finish times, sampling frequency, operating temperature and time out of specification.

| | Internal (°C) | External (°C) |
|---|---|---|
| Serial Number | 1148-0001 | |
| H/w version | 2.2x | |
| Trip No. | 0 | |
| Description | | |
| Battery | 99.9 % | |
| Original time zone | (UTC-5:00) Standard time | |
| Current time zone | (UTC+12:00) Daylight time | |
| Start | 11/29/2011 11:38:15 AM | |
| Finish | 11/30/2011 3:36:15 AM | |
| Sampling | 1 Minute | |
| Readings | 959 (958 Minutes) | |
| Active | -40.5 to 70.4 °C | -40.5 to 70.4 °C |
| Specification | -40.5 to 70.4 °C | -40.5 to 70.4 °C |

**View Manager** **Summary Overview**

## 24.6 STATISTICS

The second menu option under the Summary menu is the Statistics menu option. This menu option provides the basic statistics relating to your logger file, including; your loggers serial number, description and average, highest and lowest readings.

| | Internal (°C) | External (°C) |
|---|---|---|
| Serial Number | 1148-0001 | |
| Description | | |
| Average | 27.8 | 27.5 |
| Highest | 59.4 | 59.7 |
| Lowest | -18.5 | -19.4 |

**View Manager** **Statistics**

## 24.7 ANALYSIS

The third menu option under the Summary menu is the Analysis menu option. This menu option is a combination of the summary overview and statistics menu options.

| | Internal (°C) | External (°C) |
|---|---|---|
| Serial Number | 1148-0001 | |
| H/w version | 2.2x | |
| Trip No. | 0 | |
| Description | | |
| Battery | 99.9 % | |
| Original time zone | (UTC-5:00) Standard time | |
| Current time zone | (UTC+12:00) Daylight time | |
| Start | 11/29/2011 11:38:15 AM | |
| Finish | 11/30/2011 3:36:15 AM | |
| Sampling | 1 Minute | |
| Readings | 959 (958 Minutes) | |
| Active | -40.5 to 70.4 °C | -40.5 to 70.4 °C |
| Specification | -40.5 to 70.4 °C | -40.5 to 70.4 °C |
| Average | 27.8 | 27.5 |
| Highest | 59.4 | 59.7 |
| Lowest | -18.5 | -19.4 |
| Out Of Specification | None | None |

**View Manager** **Analysis**

## 24.8 OUT OF SPECIFICATION

The fourth menu option under the Summary menu is the Out of Specification menu option. This menu option simply displays those readings in your downloaded file which are above or below the alarm temperatures specified.

| | External Left (°C) | External Right (°C) |
|---|---|---|
| Serial Number | 1419-0001 | |
| Description | Fridge | |
| Out Of Specification | 450 Seconds | 36 Minutes |
| | 270 Seconds from -27.0 to -26.1 | 30 Minutes from 21.1 to 26.0 |
| | 90 Seconds from -26.0 to -25.1 | 6 Minutes from 41.1 to 46.0 |
| | 90 Seconds from 41.1 to 42.0 | |

**View Manager Out of Specification**

**Note:** For detailed information regarding the operation of CRYOPAK DIGITAL Console please refer to the help guide provided within the software. You can access the help menu via the dropdown menu Help, or CONTROL H. Alternatively you can select the help symbol from the Console task bar located below the dropdown menu, and click on an item located on the screen that you require assistance with.

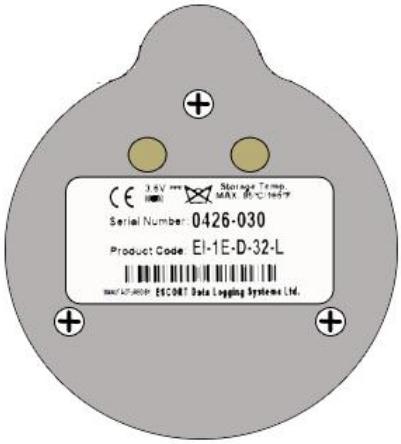
# 25. Changing your iLog's battery

You have the ability to change your iLog's battery, but once opened your loggers IP rating becomes void and will not be covered under warranty. To replace your logger's battery, please follow the following steps:

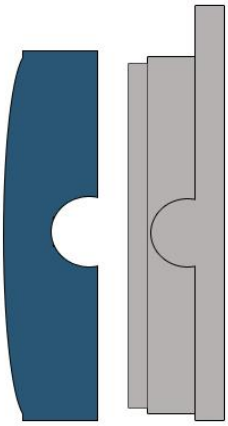
1. Purchase a SAFT 3.6V ½ AA, Lithium battery (can be purchased through your CRYOPAK DIGITAL distributor or local electronics store).
2. Remove the three screws located on the rear of your iLog logger.
3. Carefully separate the two halves of your iLog's plastic case and ensure that you can locate the three small screw O-ring seals and larger O-ring case seal.

**Note: If you are changing the battery on an iLog humidity logger it is important not to make contact with the sensor. If you accidentally remove the humidity sensor and bung from the iLog case, you can reinsert the sensor using the guide hole in the PCB (Printed Circuit Board).**

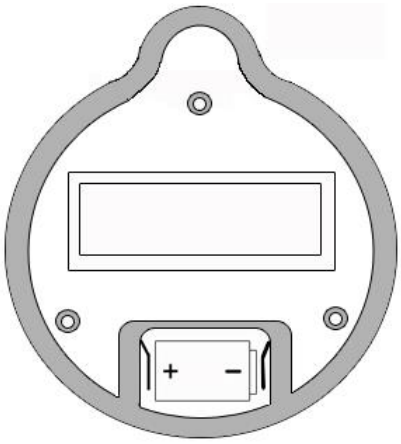
4. Move the battery located within the battery compartment so that the batteries polarity can be viewed. The polarity of the battery should be as follows **+ C -.**
5. Remove the battery by pushing firmly on either end of the battery and pulling the battery towards you.
6. Make sure you RESET the logger, by shorting the battery terminals with screwdriver for 30 sec.
7. Insert the new battery by separating the battery springs, ensuring that the battery is fitted in the correct direction (polarity **+ C -**).
8. Place the three small screw O-ring seals and larger O-ring case seal on their appropriate positions and replace the lid of your iLog case ensuring the lid of the case is the correct direction.
9. Finally, re-attach the three screws located on the back of the logger case so that a tight seal is formed between both case halves.




iLog back view



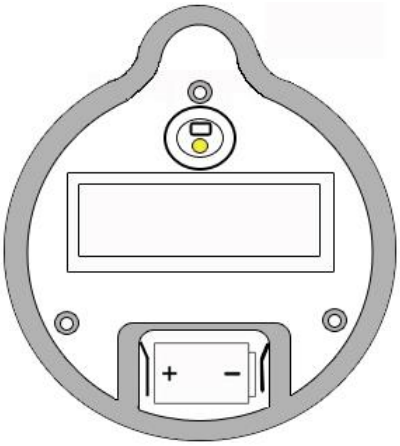
iLog side view



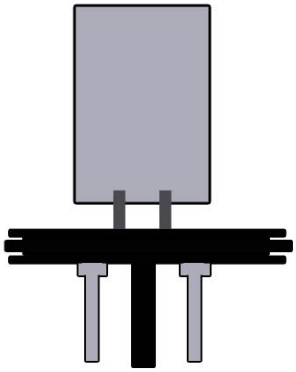
iLog internal view

## 26. Cleaning an iLog's humidity sensor

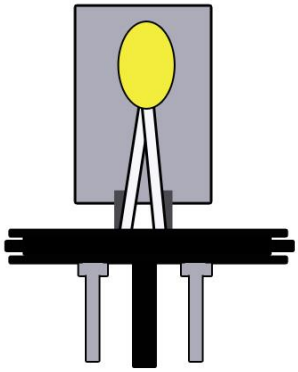
The iLog humidity sensor needs to be clean in order to operate at an optimum level. If your iLog's humidity sensor comes into contact with a foreign object (e.g. fingers), it is vital that the sensor is cleaned with a cleaning solution. We recommend that a cleaning solution which is 50% isopropyl alcohol (IPA) and 50% water is used to clean the sensor. We also advise that you use a cotton bud or clean cloth to clear the sensor of foreign materials.



iLog humidity internal view



iLog humidity sensor



iLog humidity and temperature sensor

## 27. Specifications

**iLog Temperature Logger**

| | |
|---|---|
| Temperature Range | D range -40ºC to 70ºC (-40ºF to 158ºF) |
| | C range -20ºC to 100ºC (-4ºF to 212ºF) |
| | N range -100ºC to 40ºC (-148ºF to 104ºF) |

| | |
|---|---|
| Specifications | Internal, Internal/External, 2x External and Internal/Humidity |
| Memory | 32,000 readings |
| Resolution | 0.1ºC (0.1ºF) |
| Accuracy | +/- 0.3ºC (0.3ºF) |
| LCD | Software programmable |
| LED's | Active and Alarm |
| Data Recovery software | Via standard CRYOPAK DIGITAL PC interface and CRYOPAK DIGITAL Console |
| Size | Diameter 76mm, height 36mm |
| IP Rating | Internal sensor IP67, others IP51 |
| Warranty | 2 years (excluding battery) |
| Power | 1x User replaceable SAFT 3.6 volt ½ AA battery |
| Case Material | Polycarbonate |

**iLog Humidity Logger**

| | |
|---|---|
| Humidity Range | 0 – 100% RH |
| Memory | 32,000 readings |
| Resolution | 0.1% RH |
| Accuracy | +/- 3% |

# 28. Warranty information

*Warranty conditions are set out in the CRYOPAK DIGITAL current Terms and Conditions as published on the date a claim is made. Below please find the wording as per version TCEDLSINT042. This is, however, not binding and the current Terms and Conditions will prevail over the details given here.*

Product Warranty period is 24 months (excluding batteries).

**Warranty does not cover:**
- Loss of use or consequential loss.
- Calibration if the unit has been subject to environmental conditions outside the specified ones.
- Willful damage, mistreatment, misuse, or abuse of the product.
- Loss or damage caused by the ingress of moisture, unless ordered with immersion rating.
- Batteries.
- Circumstances where the unit has been modified from manufacturers specifications.
- Exposure of the logger to temperatures outside the specified storage temperature.
- Exposure of the logger to environmental conditions outside the specified ones.

In case of a warranty claim CRYOPAK DIGITAL will repair the goods or supply an equivalent replacement.

In some circumstances, where a specific return was authorized, CRYOPAK DIGITAL may permit the use of its Federal Express account for returning goods. Such permission is valid ONLY for the authorized shipment. CRYOPAK DIGITAL will not accept any freight charges for goods that have been returned without CRYOPAK DIGITAL express permission.

**Customers and distributors may return product to us for accuracy testing, if they have doubts as to the product's overall accuracy:**
- If the product is returned within the warranty period, a Traceability certification will be performed, and a certificate issued.
- If the logger does not pass the certification, i.e., the logger is at fault, the logger will be replaced or repaired as per the warranty conditions and no charges (other than freight charges) will apply. The new logger will be issued with a Traceability certificate free of charge.

- If the logger reads within the specifications, a Traceability certificate will be issued, and you will be charged for this service.
- If the product is returned outside the warranty period, a Traceability certificate will be issued and charged regardless of the outcome of the test.
- CRYOPAK DIGITAL will not pay for any performance tests undertaken by any outside organization without prior approval.

# 29. Recycling of electronic devices

Some parts in products from CRYOPAK DIGITAL consist of recyclable materials, but others should not be disposed of in household waste. To avoid pollution, we kindly ask you to adhere to national policies and regulations concerning waste disposal and recycling. iLog data loggers must be returned to your distributor for disposal (European Standard EN 50419:2005).

# 30. Contact details

**If you require further information regarding Cryopak Digital products, please contact us at:**

### USA

| | |
|---|---|
| Office: | 72 Executive Circle, Roanoke, VA 24012 |
| Phone: | +1-540-254-1433 |
| | +1-732-346-9200 Ext. 150 |
| Fax: | +1-540-254-2433 |
| Email: | techsupport@cryopak.com |

### CANADA

| | |
|---|---|
| Phone: | +1-514-324-4720 |
| | +1-514-773-5966 |
| Fax: | +1-514-324-9623 |
| Email: | support@cryopak.com |

### FRANCE

| | |
|---|---|
| Address: | TCP Cryopak France |
| | 1 Rue Berthelot |
| | Z.I. La Maine |
| | 76150 Maromme |
| Phone: | +33 2 32 82 59 65 |
| Email: | techsupport@cryopak.com |

**You can find additional information regarding all our products at:**

**www.CryopakDigital.com**
https://www.cryopakdigital.com/multi-use/ilog-series/