



DL3000

DATA TRANSFER MODULE

Operator's manual

Ref: MP avril 2006

Crane Warning Systems Atlanta  
1-877-672-2951 Toll Free  
1-678-261-1438 Fax  
[www.craneindicators.com](http://www.craneindicators.com)  
[sales@craneindicators.com](mailto:sales@craneindicators.com)



This page has been intentionally left blank

This page has been intentionally left blank



- **The data transfer module must not be used in a hazardous environment without a hot working permit.**
  
- **The transfer module option includes:**
  - **9VDC power supply**
  - **Serial cable**
  - **Polarity adapter for cable**
  - **Data recorder**
  - **CD ROM including the software “ Datalogger i3000 ”**
  - **Operator’s manual**
  
- **Minimal requirements of the software “ Datalogger i3000 ”:**
  - **Windows 95, 98 or XP**
  - **64 MB of RAM**
  - **Monitor with a minimum resolution of 800 x 600**
  - **Serial port**



Since safety of personnel and proper use of the machine is of primary concern, different symbols are used throughout this manual to emphasize certain areas. The following definitions indicate the level of hazard when these symbols appear throughout this manual.

Whenever one of these symbols appears in this manual, personnel safety is a concern. Please take time to read and understand these definitions!



**DANGER:** INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.



**CAUTION:** INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY. IT MAY ALSO BE USED TO ALERT AGAINST UNSAFE PRACTICES.



**IMPORTANT:** INDICATES A SITUATION THAT MAY CAUSE MACHINE DAMAGE IF NOT CORRECTLY FOLLOWED.



**NOTE:** PROVIDES INFORMATION THAT MAY BE OF SPECIAL INTEREST.

This page has been intentionally left blank



## TABLE OF CONTENTS

<b>1</b>	<b>General description of the system</b>	<b>page 11</b>
1.1	Introduction	page 11
1.2	General view of the external data transfer module	page 12
1.3	Data transfer module lights	page 13
1.4	Description of components	page 14
<b>2</b>	<b>Operation</b>	<b>page 17</b>
2.1	Operating principle	page 17
2.2	Transfer procedure between the i3000 and the data transfer module	page 17
2.3	Transfer procedure between the 650v3 and the data transfer module	page 21
2.4	Transfer procedure between the data transfer module and a PC	page 25
<b>3</b>	<b>Troubleshooting</b>	<b>page 29</b>
3.1	During the data transfer from the i3000 or 650v3 to the data transfer module	page 29
3.2	During the data transfer from the data transfer module to a PC	page 29

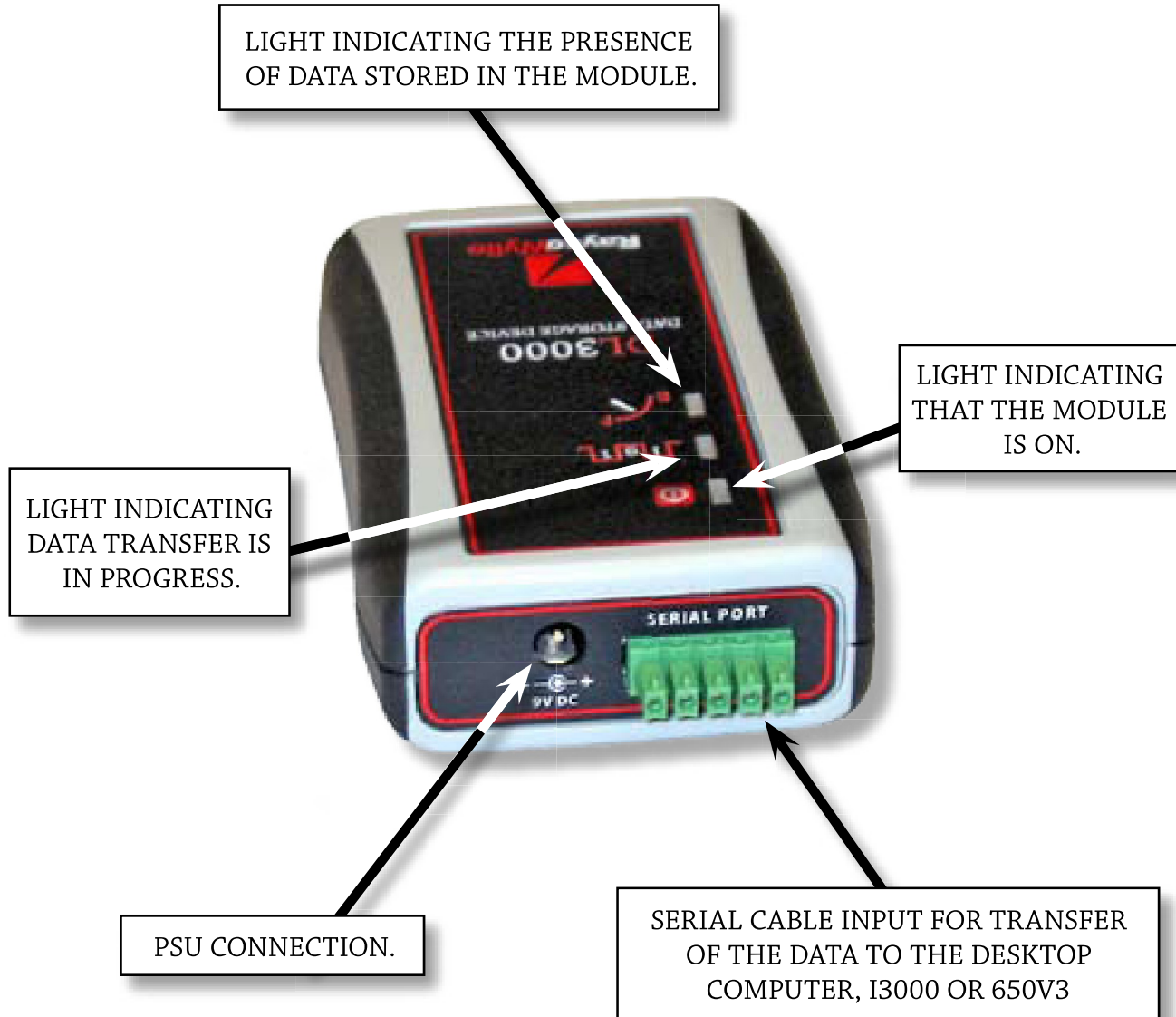
This page has been intentionally left blank

-1-

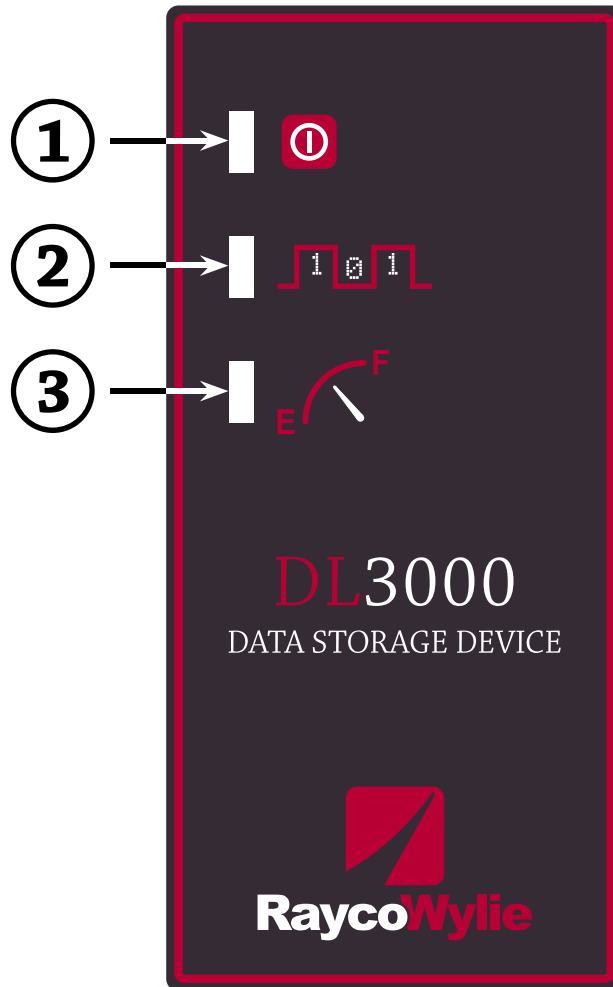
**GENERAL DESCRIPTION OF THE SYSTEM****DL3000****1.1 INTRODUCTION**




The DL3000 is designed to eliminate the use of a laptop computer during the recovery of data stored by the data logger of the i3000 or the 650v3 rated capacity indicator systems.

## 1.2 GENERAL VIEW OF THE EXTERNAL DATA TRANSFER MODULE



### 1.3 DATA TRANSFER MODULE LIGHTS



①	 Green: Connected and powered by the i3000 system. Yellow: Connected to PC and powered by an external 9V DC supply.
②	 Blinking Green: Data transfer in progress. Blinking Red: Retrying to transfer data.
③	 Green: Memory is <i>empty</i> and ready to receive new data. Yellow: Memory is <i>full</i> of valid data ready for transfer to PC. Red: Memory contains corrupted data.

## 1.4 DESCRIPTION OF COMPONENTS

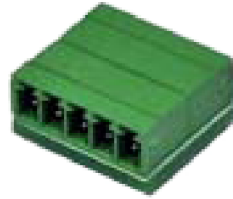
**1) Power supply:** voltage adapter with the following specifications: 9V, 500mA. It powers the data transfer module during the data transfer to the computer.



**2) A serial cable:** connects the desktop computer to the data transfer module.



**3) A polarity adapter:** allows polarity changes (male connector to female connector).



**4) External data transfer module:** retrieves the data from the data logger of the I3000 or the 650v3 for later uploading to a personal computer for detailed analysis.



This page has been intentionally left blank



-2-

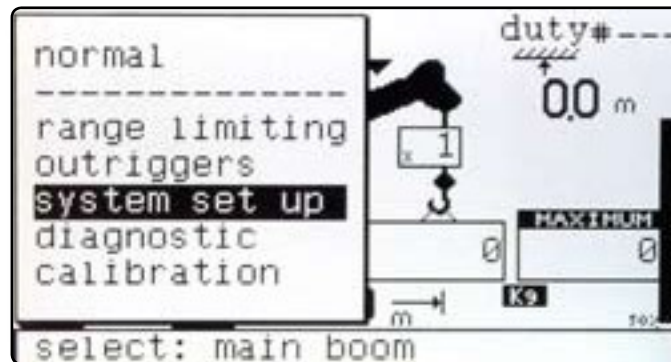
## OPERATION

### 2.1 OPERATING PRINCIPLE

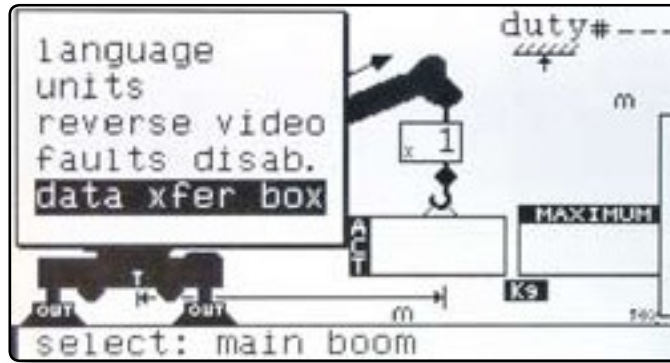
The external data transfer module retrieves data from the data logger of the i3000 or 650v3 and then transfers the data to a desktop computer. It is an intermediary between the I3000 or 650v3 and the office computer.

### 2.2 TRANSFER PROCEDURE BETWEEN THE I3000 AND THE EXTERNAL DATA TRANSFER MODULE

1. On the i3000, press button 1, “Mode”, a pop-up menu appears. Move the cursor to highlight the option ‘system set up’ using buttons 2 and 3 (arrow up and arrow down).



Press button 4, “Enter”, to return to the sub-menu. Highlight the option “dated to xfer box”. By selecting this option using button 4, all the data recorded by the i3000 will be transferred to the external data transfer module.



2. Before selecting this option, make sure that:

- The transfer module is properly connected to the serial receptacle (small black box with female connector).

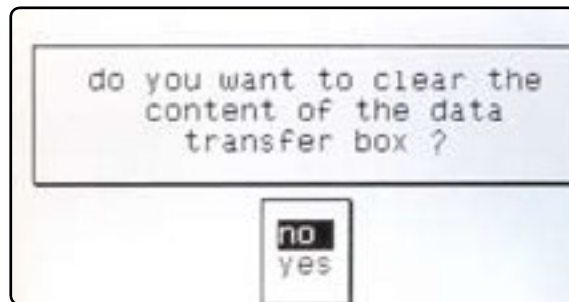


- When the transfer module is connected, verify that the power on light is **green**.

**3.** If the transfer module already contains data (yellow light on), a message will appear on the screen of the i3000 asking you to erase all the present data in the transfer module.



If you wish to keep this data you must answer no and transfer the data to a personal computer before continuing (see section 2.4).



**4.** The central green light of the transfer module will flash during the transfer process. This indicates that the data is being transferred. If the flashing light is red, then the received data passes through a more rigorous process. It should go back to the green color at the end of the process.

5. At the end of the transfer, the stored data light will change to yellow. This indicates that the transfer has been done successfully. If the light is red, it indicates a problem occurred during the transfer and that the data is corrupted. Repeat the transfer procedure, if the problem persists then there may be a problem with your data transfer module.



**Remarks:**

- If the transfer was successfully completed, the data stored in the memory of the i3000 system will be erased.
- This module takes only one transfer at a time. For example, if you have 2 machines fitted with i3000 systems and a single transfer module, you will have to make the transfer from machine 1 and upload the data to a personal computer before transferring the data from machine 2.

## 2.3 TRANSFER PROCEDURE BETWEEN THE 650V3 AND THE EXTERNAL DATA TRANSFER MODULE

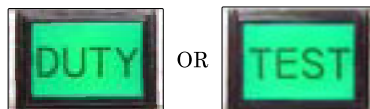
1. On the 650v3, press the buttons INFO and ACKN simultaneously to reach the administrator mode.



The following screen appears:




Press the TEST or DUTY button to show line 3.



Press the ACKN button, all the data recorded by the 650v3 will be transferred to the external data transfer module.



\*\*\* See following page before starting the transfer of data \*\*\*



3-datalogger->DL3000

2. Before pressing the ACKN button, make sure that :

- The transfer module is properly connected to the serial receptacle (small black box with female connector).

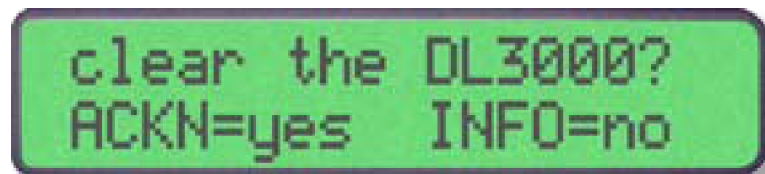


- When the transfer module is connected, verify that the power on light is **green**.

**3.** If the transfer module already contains data (yellow light on), a message will appear on the screen of the 650v3 asking you to erase all the present data in the transfer module.



If you wish to keep this data you must answer no and transfer the data to a personal computer before continuing (see section 2.4).



**4.** The central green light of the transfer module will flash during the transfer process. This indicates that the data is being transferred. If the flashing light is red, then the received data passes through a more rigorous process. It should go back to the green color at the end of the process.

5. At the end of the transfer, the stored data light will change to yellow. This indicates that the transfer has been done successfully. If the light is red, it indicates a problem occurred during the transfer and that the data is corrupted. Repeat the transfer procedure, if the problem persists then there may be a problem with your data transfer module.



**Remarks:**

- If the transfer was successfully completed, the data stored in the memory of the 650v3 system will be erased.
- This module takes only one transfer at a time. For example, if you have 2 machines fitted with 650v3 systems and a single transfer module, you will have to make the transfer from machine 1 and upload the data to a personal computer before transferring the data from machine 2.

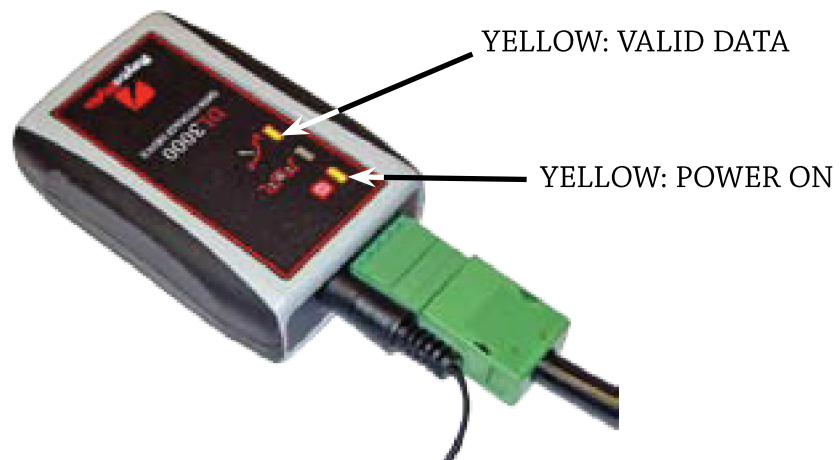


## 2.4 TRANSFER PROCEDURE BETWEEN THE EXTERNAL DATA TRANSFER MODULE AND A DESKTOP COMPUTER

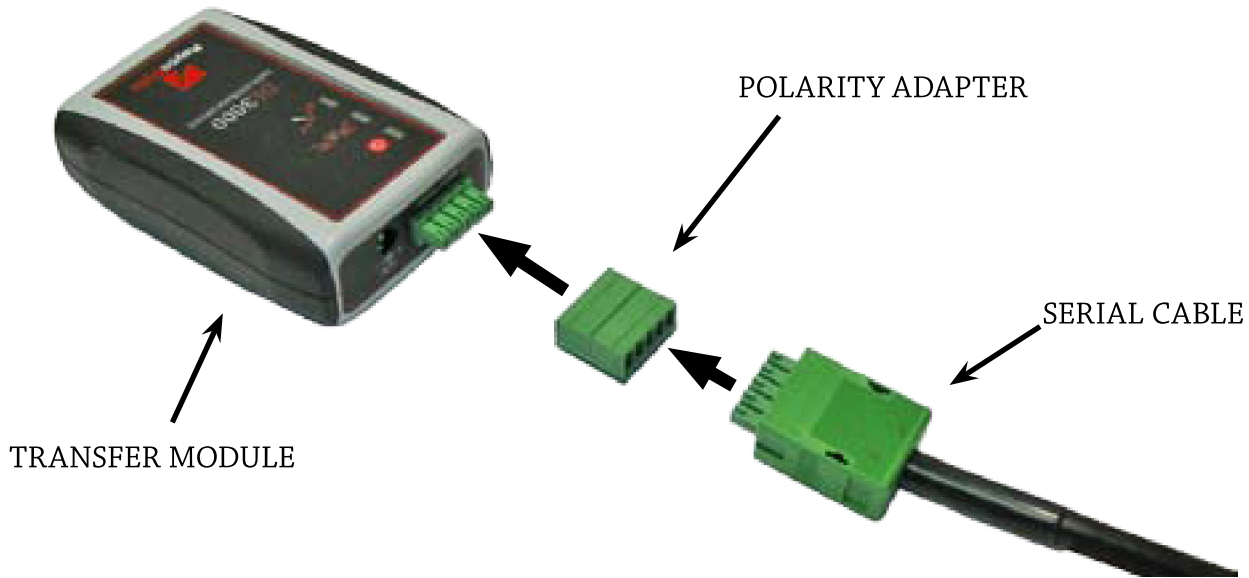
1. Ensure that the transfer module is properly connected. You will need to use the 9 VDC voltage adapter supplied.



When the power supply is connected, the power on light will turn yellow. The data stored light should also be yellow to indicate there is data to upload. If it is green, there is no data in the recorder. If it is red, the data stored in the recorder is corrupted.

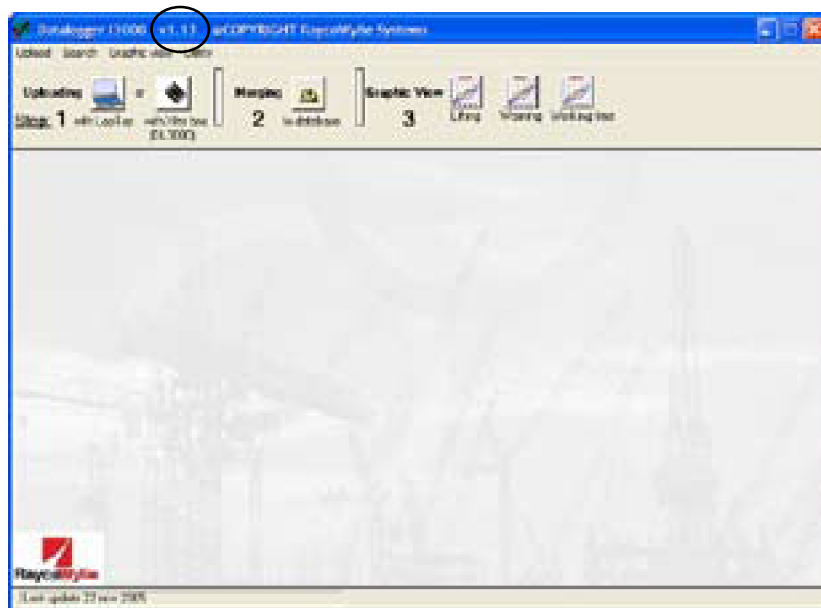


**2.** You will also need a serial cable specially designed for this application. A small module is supplied to change the polarity (male to female). Connect this cable between the desktop computer and the transfer module. You are now ready to proceed with the data transfer.



**3.** Your computer must have one of the following operating system versions: Windows 95, Windows 98, Windows XP to execute the data logger software.

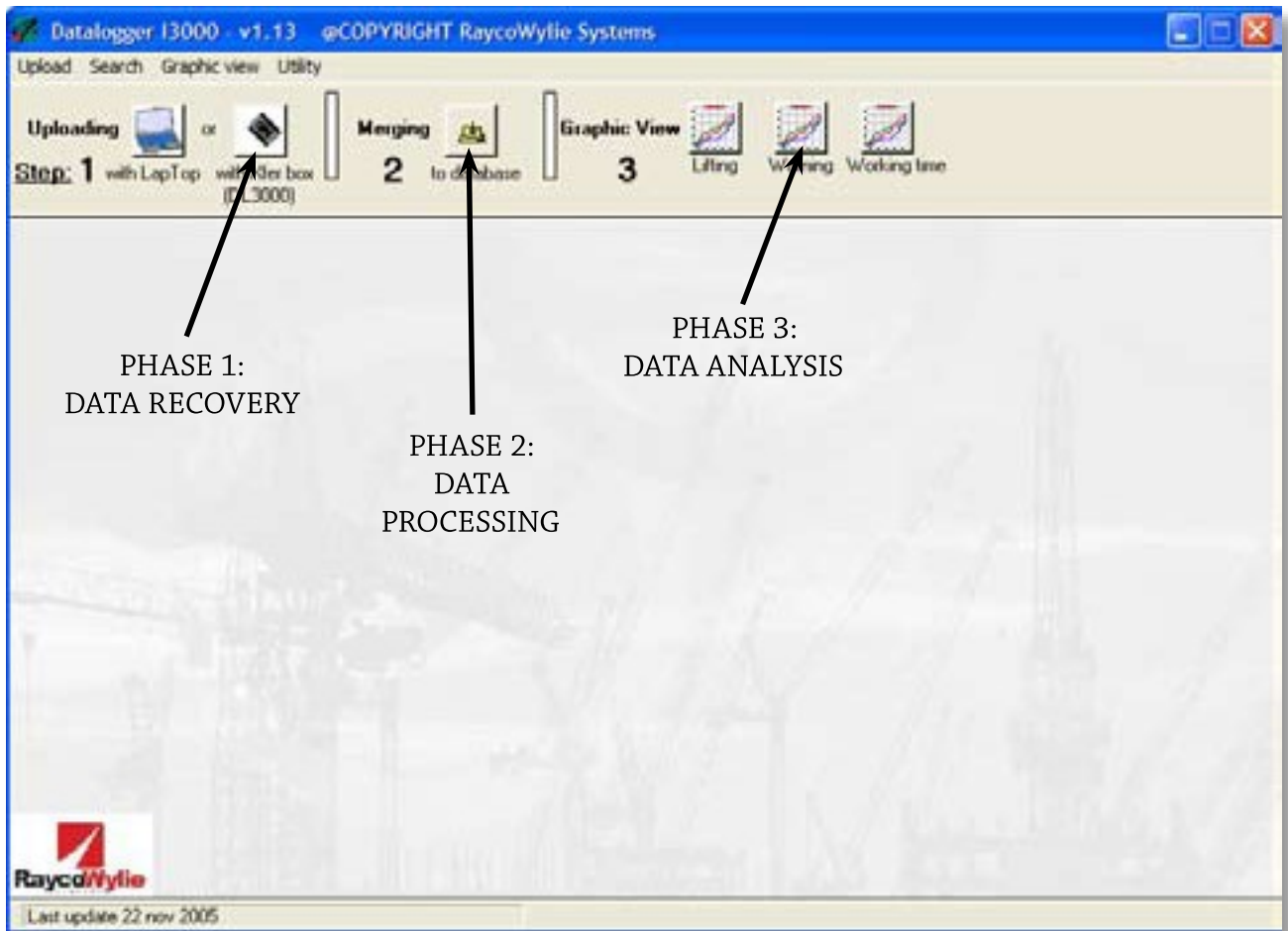
**4.** The i3000/650v3 DATALOGGER software must be already installed on your personal computer. If it is not the case, review the data logger’s operation manual for installation procedures. Verify that the installed version is at least equal or superior to V1.14.



## 5. Launch the i3000/650v3 DATALOGGER program.

This software has 3 different phases. The first one consists on uploading the data from a laptop or from the external data transfer module. The second phase integrates the data received into a database. The third phase shows the data on graphs and reports.

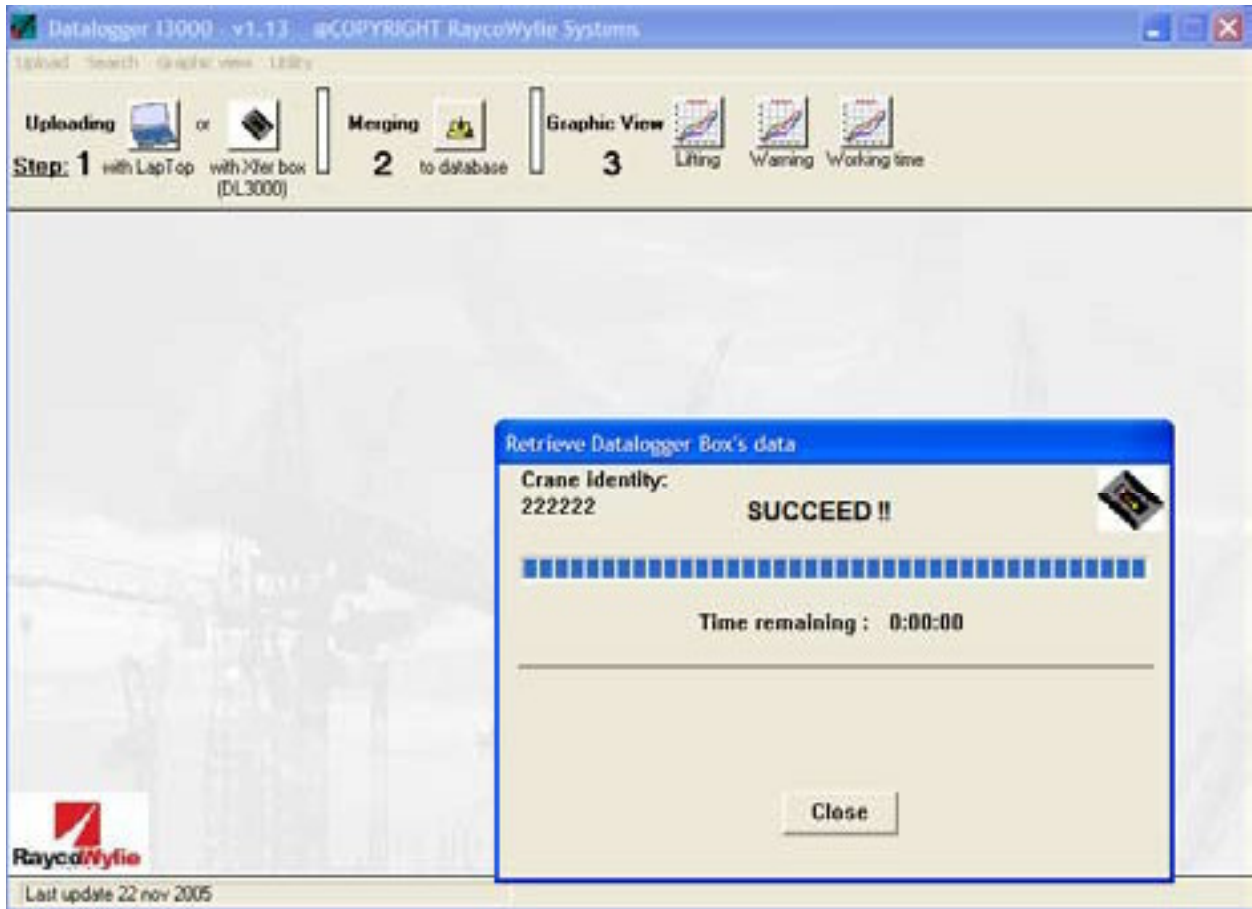
This manual is only concerned with recovering data from a data transfer module. For information on other phases, please consult the manual supplied with the datalogger software.



## 6. Uploading the data from the transfer module to your personal computer.

In the top left corner of the main screen of the datalogger software, you will find 'Step 1: Uploading'. Click the button represented by the icon of the data transfer module (DL3000). A new window will appear on the screen indicating the state of progress of the data transfer; alternatively, any faults in the transfer process will be reported here.

During the transfer, the central light on the transfer module will flash. If the transfer process succeeds, the information in the external data transfer module will be erased and the data light will turn green.



**7.** When the central light is switched off, you will be able to disconnect the power supply as well as the serial cable of the data transfer module.

-3-

## **TROUBLE SHOOTING**

### **3.1 DURING THE DATA TRANSFER FROM THE I3000 OR THE 650V3 TO THE DATA TRANSFER MODULE**

Make sure that the power supply light is on. If it is not the case then either there is a problem with the cable connection between the i3000 or 650v3 or the transfer module is faulty.

Make sure that there are no other peripherals connected to the serial port of the i3000 or the 650v3.

If the data stored light becomes red after the transfer instead of yellow, try again and if the problem persists then there is a problem with the transfer module.

### **3.2 DURING THE DATA TRANSFER FROM THE TRANSFER MODULE TO THE DESKTOP COMPUTER**

Make sure that the power supply light is on. If it is not the case then either the voltage adapter or the transfer module are faulty.

Make sure that there are no other peripherals connected to the serial port of your desktop computer. Also make sure that all other programs that may use the same serial port are closed before launching the datalogger program.

This page has been intentionally left blank



