

# Cooled Incubators Series 1A, 2, 3 & 4

## Instruction Manual

# CONTENTS

<b>Section 1: General Description</b>		<b>Page No.</b>
	List of Models	3
	General Details	4-6
1.1	Introduction	7
1.2	Construction	7
1.3	Temperature Control	7
1.4	Cooling	7
1.5	Air Flow	7
<b>Section 2: Initial Examination and Installation</b>		
2.1	Commissioning	8
2.2	Controls	8
2.3	Temperature Controller	9
2.4	Indicator & Control Layout	9
<b>Section 3: Optional Extras Where Fitted All Models</b>		
3.0	Automatic Dual Temperature Cycling	10
3.0A	Interior Illumination	10
3.1	Automatic Defrost	11
3.2	High/Low Alarm Option	12
3.3	Inner Perspex Door	12
3.4	Chart Recorder	13-15
<b>Section 4: Programmable Models</b>		
4.1	Programmer Details	16
4.2	Example Programme	17
<b>Section 5: Maintenance &amp; Repair</b>		
5.1	Equipment Ratings	18
5.2	Replacement of Fluorescent Lamps or LEDs	18
5.3	Routine Maintenance	18
<b>Section 6: Guarantee</b>		
6.1	Terms & Conditions for LMS Guarantee	19
6.2	Spares, Servicing & Repairs Contact	20
6.3	Decontamination Notice	21
6.4	Fax Back Guarantee Registration	22
6.5	LMS Services	23
6.6	Application for Servicing	24

# **Instruction Manual for LMS Cooled Incubators**

## **Series 1A**

80 – 76 litre capacity  
120 – 120 litre capacity  
201 – 201 litre capacity  
280 – 272 litre capacity

## **Series 2 Models**

210 - 135 litre capacity  
220 - 200 litre capacity  
230 - 290 litre capacity  
240 - 420 litre capacity

## **Series 3 Models**

100 – 100 litre capacity  
200 – 227 litre capacity  
300 – 290 litre capacity  
400 – 450 litre capacity

## **Series 4 models**

600 – 600 litre capacity  
1200 – 1200 litre capacity

We thank you for purchasing a LMS Cooled Incubator, which we trust, will give you many years of satisfactory service.

Manufactured in the United Kingdom using the finest materials and modern production techniques your Cooled Incubator has already undergone extensive testing in our factory.

For correct operation it is essential that you observe the operating and maintenance instructions in this manual.

LMS, established in 1965 and incorporated in 1979, LMS is a company specialising in the manufacture and servicing of laboratory equipment, trading principally in the United Kingdom and Europe as well as throughout the world.

The business is structured into two main sectors:

- Specialist **Manufacture** of temperature controlled cabinets
- Established third party **Service, Maintenance & UKAS Accreditations**

### **Manufacture**

Specialist manufacture of temperature controlled cabinets with an extensive range of applications for the testing of products, cultures, plant and insect life etc. over a wide and closely controlled temperature range.

The design of the purpose built Cooled Incubator facilitates the addition of optional extras to provide greater flexibility for individual use, making it suitable for a wide range of applications including: -

Study of plants and insects	Tissue Culture
Seed germination and vernalisation	Sample storage
Fruit Fly culture	Immunology
Product shelf life tests	Microbiology tests

### **Service & Maintenance**

LMS Limited is an independent third party servicing company which, for over 50 years, has been providing laboratory engineering services to a wide range of organisations, covering most makes and types of Cooled Incubators, laboratory Fridges & Ovens. The broad customer base covers such diverse operations as: the water industry, commercial, public health and research laboratories, hospitals, the dairy, food and drink industries etc. LMS Limited is also accredited by UKAS to provide on-site accreditation for temperature on various types of equipment.

Among the services provide are: -

Periodic service and safety inspections	Emergency breakdown cover
Calibration services to traceable standards	UKAS Accreditation for Temperature

**For a free no obligation quotation for any of the above please complete the details on the application for Service page and either:-**

**Fax to 01732 450127**  
**or**  
**Email to: [service@lms.ltd.uk](mailto:service@lms.ltd.uk)**

# EXPLANATION OF SYMBOLS USED



Electrical Earthing Point



Electrical Hazard Warning  
(Mains Electrical Supply Within)

**AUX. CIRCUIT**

Exhibited where an internal power socket is fitted

**REFRIGERATION**

Refrigeration Isolation Switch

**AUTO DEFROST**

Auto Defrost On/Off Switch



Weee Label

**MODEL** \_\_\_\_\_  
**SER. No.** \_\_\_\_\_  
**TEL. LMS 01732 451866**

Serial Number Label

MODEL No.  
SERIAL No.  
SUPPLY VOLTS: 220-240v 50HZ  
FUSE RATING TYPE: F10A  
MAX LOAD: 7AMPS  
REFRIGERANT:  
GRAMMES:



LMS LTD  
SEVENOAKS, KENT



Serial Number Plate

## **General Safety Instructions**

The physical and chemical properties of your load should be carefully considered with regard to the effect this may have on the LMS Cooled Incubator. They are **not** internally sparkfree or explosion proof. Therefore solvents and/or chemicals which may form a flammable mixture together with air are unsuitable for these cabinets; otherwise considerable damage can occur.

### Transportation

Series 1A & 2 If these cabinets have to be carried it is recommended that at least 2 people assist and that gloves should be used on all occasions. The cabinet should be kept upright at all times.

Series 3 & 4 These cabinets are supplied on pallets and it is recommended that these are moved by pallet truck or fork lift by competent persons, including someone to assist in stabilising the load. The cabinet should be kept upright at all times.

## **Serial Number Plate**

The Serial Number Plate contains the year of manufacture, in the following format: -

xxxxx/18xx = year of manufacture 2018

## **Section 1**

### **1.1 INTRODUCTION**

The standard range of LMS cooled incubators comprises of 14 models, all of which are available with a range of optional extras to suit individual requirements. A further two models, 410XAL & 610XAL which have special built in features, are also available details on request.

### **1.2 CONSTRUCTION**

The outer casing of all models in Series 1A, 2 & 3 is of sheet steel finished in white stoved enamel. The internal liner of models in Series 1A, is a white aluminium, Series 2 is of a high impact vacuum formed plastic with a minimum of crevices, and all corners are radiused Series 3 models have a stainless steel interior. Series 4 models have both a stainless steel exterior and interior and are supplied with 5 stainless steel shelves (model 600) and 10 stainless steel shelves (model 1200). Foam insulation is used, to ensure maximum insulation against external ambient temperature.

All cabinets incorporate both a door lock and magnetic gasket with all control features being set into a control panel and positioned so as to minimise the risk of accidental alteration.

### **1.3 TEMPERATURE CONTROL**

The temperature control method utilises a controller offering digital selection and readout of temperature. See section 2.3 for operation.

Heating time of 30 minutes approximately, from 25°C to 50°C, however a further period may be required to maintain temperature stability within the chamber.

### **1.4 COOLING**

Cooling is provided by a hermetically sealed refrigeration system. All LMS Cooled Incubators comply with the latest CFC-free regulations.

Cooling time of 60 minutes approximately, from 25°C to 0°C, however a further period may be require to maintain temperature stability within the chamber.

### **1.5 AIR FLOW**

A full air flow system is used. The airflow being at low velocity but high volume.

## Section 2

### **INITIAL EXAMINATION AND INSTALLATION**

#### 2.1 **COMMISSIONING**

- 2.1.0 Please check the Tip N Tell indicator on the packaging to ensure the instrument as not been tipped or laid down. If the blue beads are showing in the top half of the indicator please refer to LMS Ltd.
- 2.1.1 Remove all packing materials.
- 2.1.2 Check for signs of external damage (this MUST be reported immediately to the Carrier and Supplier).
- 2.1.3 After the cooled incubator has been sited please **allow 24 hours before switching on.**
- 2.1.4 Check that the electrical supply details on the information Rating Plate, which is fitted to the rear panel, are in accordance with the available electrical supply. If correct please use the mains lead supplied, which you will find inside the cabinet with the user manual.
- 2.1.5 All cooled incubators are supplied with a 3 pin moulded plug, which if not suitable may be replaced by an electrician or other competent person. Connect conductors as follows: BROWN to live, BLUE to neutral, GREEN/YELLOW to earth.
- 2.1.6 Position the cooled incubator so that approximately 100mm of free space exists around the cooled incubator.
- 2.1.7 Adjust levelling foot or feet (depending on model) so that the cooled incubator is sited firmly.

#### 2.2. **CONTROLS** – Common to All Models

##### 2.2.1 Fuse

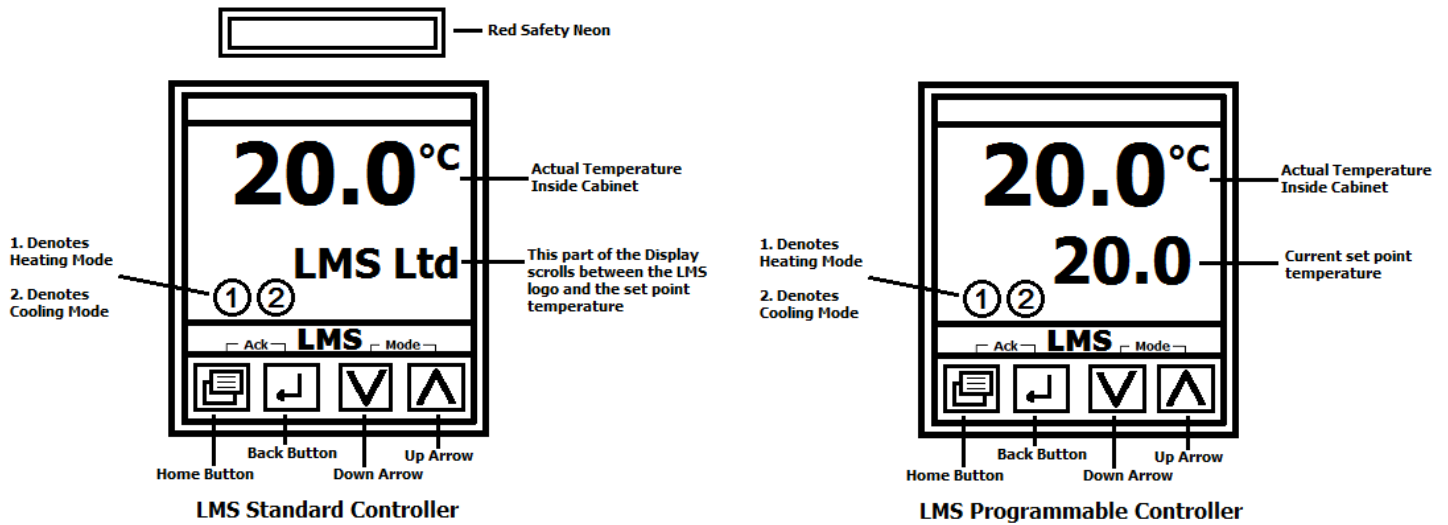
All models are fitted with an IEC fused socket, which is located on the rear of the control compartment adjacent to the Serial Number plate on which the fuse value is indicated.

##### 2.2.2 Non-Adjustable Overheat Protection Device

This device is fitted within the air mixing chamber to safeguard the cooled incubator should a fault condition of overheating develop. Operation of this device will be indicated by the Red 'safety' neon light on the front panel being illuminated. In the event of this happening the cooled incubator must be switched off until the reason for the fault condition is established and the fault itself is rectified.



## 2.3 TEMPERATURE CONTROLLER



Whilst the Standard and Programmable controllers are of similar design their functionality is considerably different. The Standard controller is designed to operate a single set point temperature control, requiring the operator to adjust the set point by using the ▲ or ▼ buttons accordingly. However the Programmable controller can operate in the same manner or by programming a sequence of temperature and time to change between two or more, maximum of eight temperatures.

Both controllers have been factory tuned and calibrated for optimum performance. To obtain the required operational temperature press either the ▲ or ▼ button, the set point temperature will be displayed on the bottom line. When the desired set point temperature is achieved, release the button. The interior temperature of the cooled incubator is displayed on the top line and will gradually adjust until the set point temperature is reached.

## 2.4 INDICATOR & CONTROL LAYOUT

The Red 'safety' neon only illuminates when an over temperature fault condition occurs – see Section 2.2.2.

The Temperature Controller display will be continuously illuminated whilst the cooled incubator is connected to a mains electrical supply.

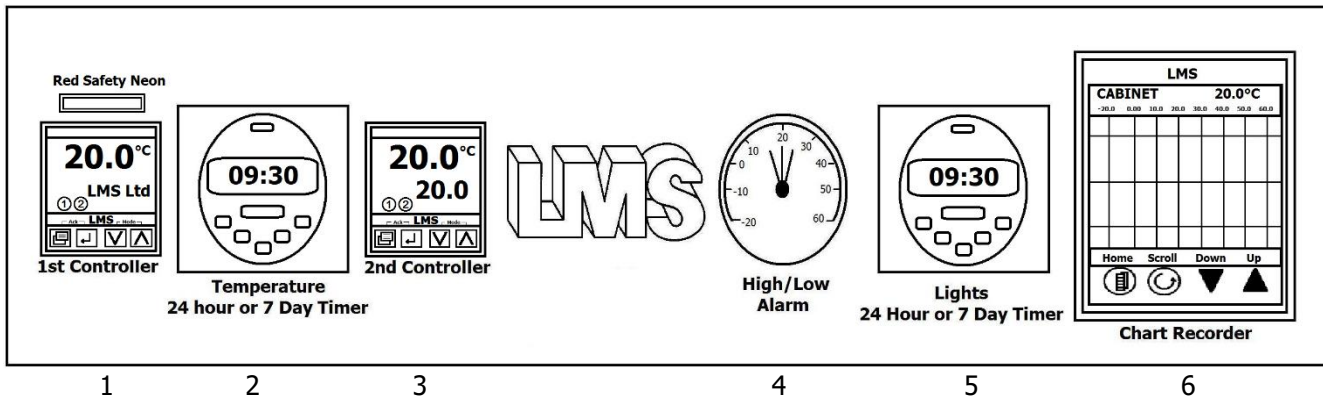
### Series 4

The green neon light and temperature controller display will be continuously illuminated whilst the cooled incubator is connected to the mains supply.

**Section 3**

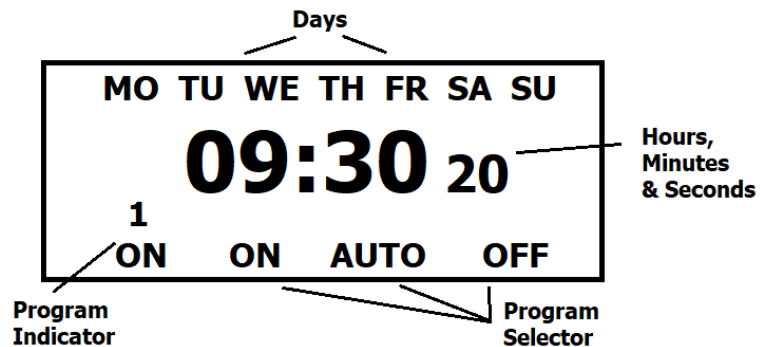
**OPTIONAL EXTRAS WHERE FITTED  
ALL NON PROGRAMMABLE MODELS**

**Control Panel**



1. First Temperature Controller.
2. Digital 24 Hour or 7 Day Timer.
3. Second Temperature Controller.
4. Adjustable High/Low Alarm.
5. Digital Timer 24 Hour or 7 Day (Lights).
6. Chart Recorder.

**LMS Digital Timer**



The LMS digital timer is used on cabinets for either switching between two controllers for automatic dual temperature control or switching the internal illumination on as required. The timer can be used for either 24 hour or 7 day cycles, with up to 16 steps.

**3.0 Automatic Dual Temperature Cycling**

On these models, the digital controllers are mounted either side of a timer and will be illuminated in turn according to the timer settings. (NB – On changeover the controllers will briefly indicate A2.50/3016 for a few seconds – this is quite normal).

Changing from one controller to the other is done automatically by the time clock which can be used for either 24 hour daily cycles or 7 day cycles, using the 'D+' button and selecting the days accordingly.

**3.0A Interior Illumination**

On cabinets fitted with interior illumination the timer is used in the same manner as above to set the light cycle as required. Please note that when the interior illumination switches on during the course of a cycle a slight rise in cabinet air temperature may be experienced.

## **Buttons**

'P' Programming Button

'H+' Hours Button

 Time Button

'M+' Minutes Button

'D+' Day/s Button

Manual Button to select program 'ON' 'AUTO' 'OFF'

## **Example Program**

The following example programme will set the time for 12 hours on starting at 9:30 am and then 12 hours off starting at 9:30 pm.

Remove the time switch cover.

1. Press button 'P' and the display will show 1 'On' in the bottom left hand corner.
2. Now press the 'H+' button and select your start time hour 9:00
3. Now press the 'M+' button and select your minutes 9:30
4. Press the 'P' button and the display will show 1 'Off'
5. Now press the 'H+' button to select the finish time hour 21:00
6. Now press the 'M+' button and select your minutes 21:30
7. Using the 'D+' button select the days you wish the programme to run.  
By default the timer will display 7 days, but you may scroll to select your requirement.

If you have now finished programming you may press the centre 'clock' button which will return you to the current time.

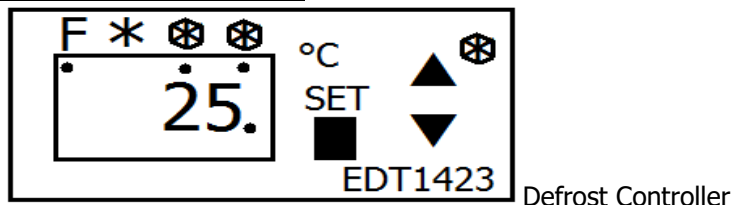
Please note that if you leave the timer without pressing a button the timer will revert to the current time.

Now press the 'Manual' button and select 'AUTO' and the programme is set. When the program starts the RED neon will be illuminated.

If however you wish to add additional programmes please press 'P' until the display shows 2 'On' and start again as at 2 above.

Should you need to change the program at any time just simply over-right or adjust the existing settings.

### 3.1 **AUTOMATIC DEFROST**



The Digital Defrost on Series 1A & 2 is an optional extra, but standard on the Series 3 & 4 models where fitted the cabinet is set to defrost every 4 hours, however the defrost controller will sense whether this is required or not. This controller is factory set for optimum use and is locked for protection against misuse. The Defrost will give a slight rise in air temperature. If this rise should create any problems the Defrost can be over-ridden by the defrost isolator switch on the rear of the back panel.

**Please note that this controller will always display the figure 25 which is not to do with any temperature setting, this is merely a function setting.**

On Series 1A, 2 & 3 cabinets, any defrost water drains away to a tray mounted on the compressor. On Series 4 cabinets the water drains into a tray (supplied) which must be fitted into the special tracks mounted underneath the cooled incubator during installation. On all models this water evaporates harmlessly away.

#### **A complete defrost is recommended periodically depending on application**

Manually set a Defrost.

1. Remove all products or samples.
2. Set cabinet temperature to 50.0°C and allow to attain this temperature and leave for a period of 12 hours. This will melt any ice built up within the cabinet and also dry the internal chamber.
3. Re-set the cabinet temperature to your required set point and allow the cabinet to reduce accordingly.
4. Once the cabinet is stabilised please return your products or samples.

Or

To effect a Defrost complete the following: -

- A. Switch off the cooled incubator at the mains switch.
- B. Allow the cooled incubator's interior to attain ambient temperature by opening the door.
- C. Allow the cabinet to completely dry-out inside before reusing (the process usually takes 24 hrs).

**Please ensure that the cabinet door remains open during this process.**

### 3.2 **HIGH/LOW ALARM OPTION**

The high/low alarm is a manually adjusted alarm option fitted to the instrument's front panel. When fitted, this instrument supplements the digital control on the control panel with a contact thermometer, having a 'Red' upper limit pointer and a 'Green' lower limit pointer. This unit, being electro-mechanical, is not dependent on the normal control electronics and therefore will take over control in an emergency situation and maintain some form of control however coarse.

In the event of an alarm condition, the following action will be taken:

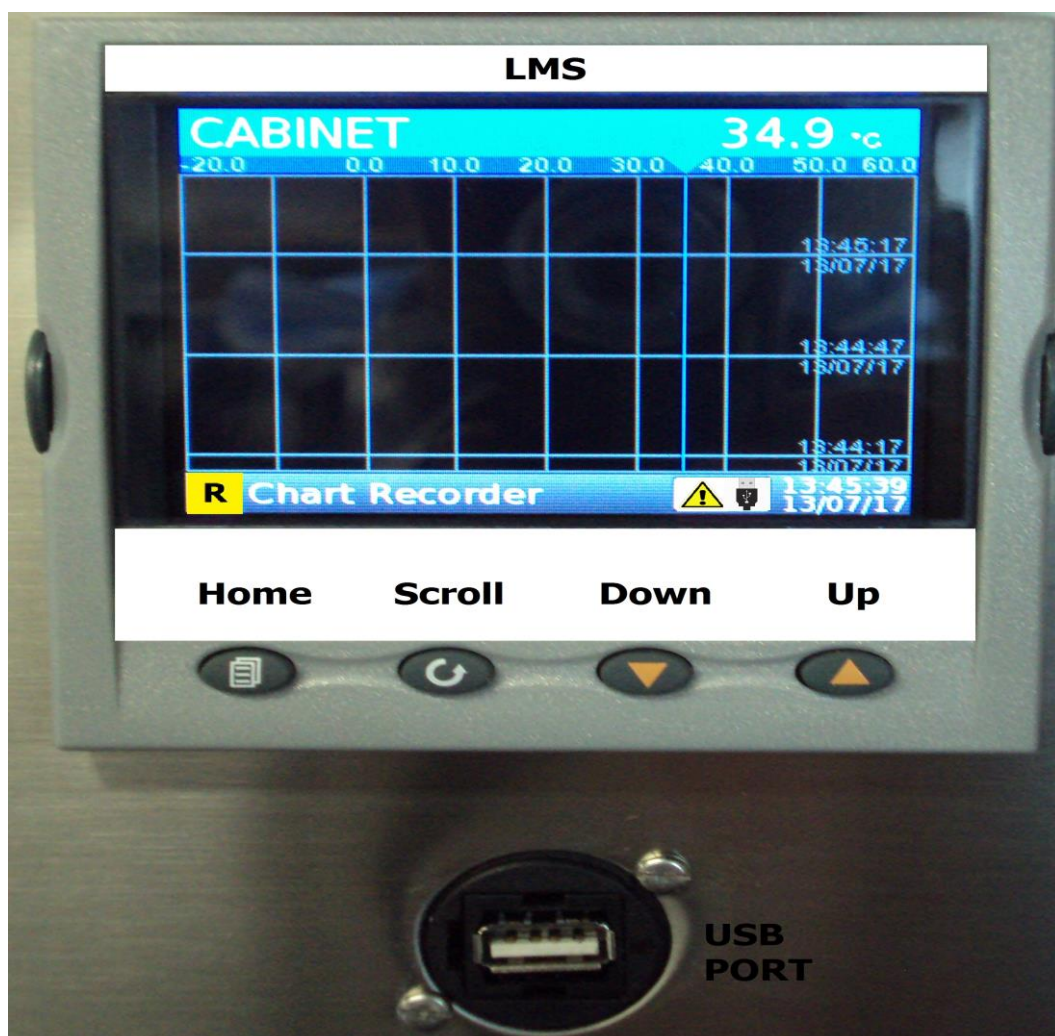
An audible alarm will sound and a secondary safety system will be activated, preventing the cooled incubator temperature from rising above or falling below the set alarm limits.

To set up, ensure the pointer is wound well up in the case of the Red and down in the case of the Green. Set the control temperature by means of the digital controller and allow the incubator to stabilise at the required control point. Once this is achieved the pointers may be realigned as close as required to the set point after making due allowances for contingencies such as door opening etc.

### 3.3 **INNER PERSPEX DOOR**

On incubators fitted with this feature and depending on the temperature difference between the inner working chamber and the space between the inner and outer doors, some slight distortion may occur to the Perspex door.

### 3.4 LMS CHART RECORDER



The LMS paperless chart recorder has been factory configured for optimum performance. The chart recorder will automatically start once the cabinet is plugged into a mains supply. It will go through an initialisation procedure and once complete it should look like the display above, which shows a vertical chart between -20.0°C to +60.0°C. You may press either the up or down arrow button to change the display to a horizontal position if preferred.

The chart recorder takes a reading of the temperature every 10 seconds and stores this in the internal memory. With this setting the memory is capable of storing approximately 2 years of continuous data. However we would recommend that you download the data using a USB stick (not greater than 8GB) on a weekly or monthly basis.

## **Download data**

1. Insert a memory stick into the USB Port.
2. Press the 'Home' button once and the display will change to show you a new menu.
3. Please ensure the bottom line reads 'Log out', if so continue at 4 below and if not start at 6 below.
4. Using the arrow keys move down to 'Demand Archiving' and press the 'Scroll' button.
5. Another menu appears and please move down using the arrow keys to 'Archive' and press the 'Scroll' button, the word 'None' will be highlighted. Using the 'Arrow' buttons you may select one of the following to download:
  - A. Last Hour
  - B. Last Day
  - C. Last Week
  - D. Last Month
  - E. All
  - F. Bring to date

For our example please select 'Last Week' and press the 'Scroll' button. The 'Archive' line will return to 'None' and the 'Status' line will display 'Transferring' and when finished it will display 'Complete'.

Press the 'Home' button twice to return to the chart display and then remove the USB stick.

When the download is complete it is a good idea to make a note of the time the download finished as we can use this to retrieve the correct data in excel.

6. Should the bottom line read 'Log in', using the 'Arrow' buttons move down to 'Log in' and press the 'Scroll' key.
7. A new menu opens called 'Access' and displays 'Logged Out'.
8. Using the 'Arrow' buttons select 'Operator' and press the 'Scroll' button, the display returns to the previous menu, showing the bottom line reading as 'Log out'.
9. Please return to 4 above.

## **Importing the data into Excel**

1. Place the USB in the computer USB port.
2. Open Excel and click on open, computer and locate the USB drive.
3. In the right hand pane you will see a folder named 'history', keep double clicking to open these folders until you reach a folder named 'CSV' and double click and you will find a list of Excel files, if this is not the case make sure the file type is set to 'All Files'.
4. Look for a file with today's date and the approximate time as noted above, double click on this to open.
5. This will open the temperature file but you will need to widen column 'A' to show the date and time as recorded.
6. You may now save this file in the usual manner.

## Other Signs seen on the Display



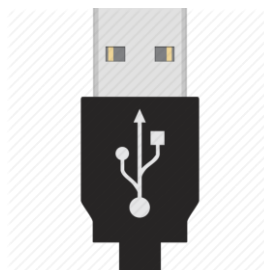
The envelope denotes that messages have been recorded within the system. Generally these are internal messages for the engineers, which show who recently logged in and when the last download was completed.

It is perfectly fine to leave them or should you wish to clear the display complete the following:

1. Press the 'Home' button and a menu will appear.
2. Using the 'Arrow' buttons move down to 'Go to view' and press the 'Scroll' key, another menu will appear.
3. Using the 'Arrow' buttons move down to 'Message Summary' and press the 'Scroll' key and you will see a list of messages.
4. Press the 'Home' key and another menu appears, using the 'Arrow' buttons move down to the 'Exit Messages' line and press the 'Scroll' key twice to exit back to the chart and the envelope sign will have disappeared.



or



The yellow sign indicates that no USB memory stick is currently being used.

Whereas the USB sign indicates that a USB memory stick is currently in situ.



This denotes that the chart recorder is recording the temperatures.



This denotes that an engineer is logged in.

## **Section 4**

### **4.1 Programmable Models (when fitted)**

The LMS Programmable version of our Cooled Incubators are controlled by a versatile controller which is designed to offer ease of use when running multiple temperatures within a given time frame.

The programmer function is capable of controlling applications needing set point temperature changes over time. Examples of this a day and night temperature cycle over 24 hours. These periods may be separated by time in hours and minutes, together with a lamps on or off feature where lights are fitted, to coincide with the day/night cycle.

At the end of the time period the program will automatically repeat until the user stops the programme running.

Should a power failure occur the controller will re-start the programme from where it stopped.

Of course the controller can also be set manually for quick single set point temperatures if required.

The steps of the programme are as follows:

Prog 1

Hour  
DWEL.U            Time frame setting may be either hours and minutes or minutes and seconds.

1:00  
TIME.1            Set to run for 1 hour.  
First time period.

-10.0  
TEMP.1            Set point temperature.  
First temperature.

On  
LAMP.1            Lights on where fitted.  
First temperature.

1:00  
TIME.2            Set to run for 1 hour.  
Second time period.

10.0  
TEMP.2            Set point temperature.  
Second set point temperature

















OFF  
LAMP.2            Lights off.  
Second temperature

OFF  
TIME.3            Denotes end of programme.



## 4.2 Example programme

**In this program we will set the first temperature at 25.0°C for a period of twelve hours with the lights on and the second temperature of 15.0°C for a period of twelve hours with the lights off this programme will run continuously until turned off.**

Press the  button and the display will show	100.0 WRK.OP	
Press the  button again and the display will show	1 PROG	
Press the  button again and the display will show	Hour DWEL.U	
Press the  button again and the display will show	1:00 TIME.1	(1 hour)
Press the  button until the display reads	12:00 TIME.1	(12 hours)
Press the  button again and the display will show	-10.0 TEMP.1	(-10.0°C)
Press the  button until the display reads	25.0 TEMP.1	(25.0°C)
Press the  button again and the display will show	On LAMP.1	
Press the  button again and the display will show	1:00 TIME.2	(1 hour)
Press the  button until the display reads	12:00 TIME.2	(12 hours)
Press the  button again and the display will show	10.0 TEMP.2	(10.0°C)
Press the  button until the display reads	15.0 TEMP.2	(15.0°C)
Press the  button again and the display will show	OFF LAMP.2	
Press the  button again and the display will show	1:00 TIME.3	
Press the  button until the display reads	OFF TIME.3	(End of Programme)
Press the  button to return to the manual set point temperature.		

To run the programme press both the   buttons together and under the set point you will see the word RUN and the program will now commence.

To stop the programme press and hold both the   buttons together until the word RUN disappears, the controller is now running in manual mode.

## **Section 5**

### **MAINTENANCE & REPAIR**

#### **5.1 EQUIPMENT RATINGS**

220/240V AC, 50 Hz. Up to 11 amps max. (see rating plate for details). The cooled incubator is designed to operate in an environment from +10°C to +30°C with a relative humidity from 5 - 85% RH non-condensing. Correct functionality of the cooled incubator or its safety features cannot be guaranteed if it is used outside these ratings.

#### **5.2 REPLACEMENT OF FLUORESCENT or LED LAMPS (WHEN FITTED)**

This must be carried out with the mains power switched off and by a competent person or engineer. Replacement lamps must be of the same size, wattage and voltage as originals.

#### **5.3 ROUTINE MAINTENANCE**

It is recommended that the cooled incubator be inspected annually by a competent service engineer. The exterior and interior surfaces can be maintained in as new condition using standard non-abrasive or non-corrosive cleaners. Solvent based cleaners must not be used. Switch off during all cleaning operations. Allow drying before switching on. The condenser on all models should be brushed clean every six months.

#### ***A complete defrost is recommended periodically depending on application***

To effect a defrost complete the following: -

5. Remove all products or samples.
6. Set cabinet temperature to 50.0°C and allow to attain this temperature and leave for a period of 12 hours. This will melt any ice built up within the cabinet and also dry the internal chamber.
7. Re-set the cabinet temperature to your required set point and allow the cabinet to reduce accordingly.
8. Once the cabinet is stabilised please return your products or samples.

Or

- D. Switch off the cooled incubator at the mains switch.
- E. Allow the cooled incubator's interior to attain ambient temperature by opening the door.
- F. If necessary, to speed up defrosting, start a heating cycle by setting the temperature to 35°C and turning the refrigeration off.
- G. Allow the cabinet to completely dry-out inside before reusing (the process usually takes 24 hrs).

**Please ensure that the cabinet door remains open during this process.**

## Section 6

### **TERMS AND CONDITIONS** **FOR LMS GUARANTEE**

- 6.1.1 Damage on delivery must be reported in writing immediately to LMS.
- 6.1.2 Equipment must be installed as per instructions.
- 6.1.3 Equipment must be used, serviced and maintained as per instructions.
- 6.1.4 Equipment must not be modified electronically or in relation to the refrigeration/air flow system unless LMS agreement is obtained.
- 1.1.5 Equipment malfunction under the terms of the guarantee must be reported to LMS.
- 1.1.6 LMS reserves the right to repair or replace damaged on delivery or malfunctioning equipment.
- 1.1.7 If it is found subsequently that the purchaser of the equipment was responsible for the damage/malfunction a charge will be made by LMS including any carriage charges.
- 1.1.8 If it is necessary to return equipment to LMS, the equipment must be packaged so as to prevent any damage and have a decontamination certificate (see 5.3) showing that the incubator has been made safe.
- 1.1.9 Guarantee is for 2 years and cannot be passed on to a subsequent equipment owner.
- 6.1.10 To register for the 2 year Guarantee please complete and return the enclosed Guarantee Card, fax back or email form in this manual.

In all cases please quote the following details: -

**Model**

**Serial No.**

These details may be obtained from the Serial Number plate on the back of the instrument or from the label attached to the inside left wall of the cabinet.

## **FOR SPARES, SERVICING AND REPAIRS**

6.2 Please contact:

LMS Ltd.  
The Modern Forge  
Amherst Hill  
Riverhead  
Sevenoaks  
Kent  
TN13 2EL

Tel. 01732 451866  
Fax. 01732 450127  
Email: [sales@lms.ltd.uk](mailto:sales@lms.ltd.uk)  
[service@lms.ltd.uk](mailto:service@lms.ltd.uk)  
[www.lms.ltd.uk](http://www.lms.ltd.uk)

## DECONTAMINATION CERTIFICATE

This form MUST be completed for each piece of equipment being submitted for repair either on site or at the LMS workshop.

The completed form should be attached to the outside of the unit so that it is clearly visible to the engineers and carriers.

Make ..... Model ..... Serial No. ....

Question - Has the unit been in contact with any of the following:-

- | <u>Category</u> |                      |
|-----------------|----------------------|
| A               | Hazardous Chemicals  |
| B               | Biological Hazards   |
| C               | Radiological Hazards |

If the answer to any of the above is YES, or if you are unsure of the answer the unit MUST be decontaminated / disinfected in accordance to the relevant protocol for the hazard involved, before an engineer or carrier can come into contact with the unit.

Category of hazard to report. ....

No hazard present. ....

I can confirm that the equipment is now free from the above mentioned hazard and is now safe to be handled by your personnel.

Company Name .....

Print Name ..... Position .....

Signature ..... Date .....

6.4

## Fax or Email Back Guarantee Registration

To qualify for the 2<sup>nd</sup> year guarantee please fax or email this form duly completed to

**01732 450127 or sales@lms.ltd.uk**

**Name:**

**Address:**

**Tel No:**

**Contact Name:**

**Date Purchased:**

**Model No:**

**Serial No:**

## 6.5

LMS Limited is an independent third party servicing company which, for over 45 years, has been providing laboratory engineering services to a wide range of organisations, covering most makes and types of laboratory equipment.

Among the services provided are:

- Periodic service and safety inspection.
- Calibration services to traceable standards.
- Emergency breakdown cover.
- UKAS Accreditation for Temperature

For a free no obligation quotation for any of the above services please complete the details on the following page and either:-

**Fax: - 01732 450127**

**Or**

**Email: - [service@lms.ltd.uk](mailto:service@lms.ltd.uk)**

**APPLICATION FOR QUOTATION TO SERVICE LABORATORY EQUIPMENT**

CONTACT NAME:
COMPANY NAME:
ADDRESS:

DATE:
TEL No:
FAX No:
EMAIL:

**TYPES OF EQUIPMENT WHICH CAN BE SERVICED OR UKAS ACCREDITED BY LMS:-**

- COOLED INCUBATORS
- INCUBATORS
- LABORATORY FRIDGES
- LABORATORY OVENS
- FREEZERS STANDARD
- FRIDGE/FREEZERS
- CHILLERS
- LABORATORY FURNACES

PLEASE LIST THE ITEMS OF EQUIPMENT YOU WISH TO BE CONSIDERED SERVICING or ACCREDIATATION

EQUIPMENT TYPE	MAKE MANUFACTURER	MODEL	SERIAL NO.	SERVICE	UKAS	BOTH

PLEASE COMPLETE AND RETURN TO:  
FAX: 01732 450127  
EMAIL: service@lms.ltd.uk

**LMS LTD, THE MODERN FORGE, AMHERST HILL,  
RIVERHEAD SEVENOAKS, KENT TN13 2EL**