

# Lovibond® Digital Incubator (56B000701)

## DI 10

### User Instruction Manual



This appliance is marked according to the European Directive 2012/19/EU on the waste of Electrical and Electronic Equipment (WEEE). By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

	
<b>DECLARATION OF CONFORMITY</b>	
The Tintometer Limited, declare that the stated product(s) below conform to the following directives/standards:	
<b>DIRECTIVES</b> 89/336/EEC, 92/31/EEC 73/23/EEC, 93/68/EEC	
<b>STANDARDS TO WHICH CONFORMITY IS DECLARED</b> EN55011, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-11, N61000-6-1, EN61000-6-3, EN 61010-1, EN61326-1	
<b>TYPE OF EQUIPMENT</b> Incubator	
<b>MODEL(S)</b> Lovibond DI 10	
 N Barnes (Technical Manager) On behalf of The Tintometer Ltd	Date: 3 <sup>rd</sup> December 2013
<small>Registered Office: The Tintometer Limited - Lovibond House - Solar Way - Solstice Park - Amesbury SP4 7SZ - UK Registered in England No. 45024 Tel: +44(0)1980 664800 Fax: +44(0)1980 625412 Email: <a href="mailto:sales@tintometer.com">sales@tintometer.com</a> Internet: <a href="http://www.tintometer.com">www.tintometer.com</a> Lovibond &amp; Tintometer are registered trademarks of The Tintometer Limited</small>	

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### **Technical Data:**

Voltage input: 12V DC, 2.5 Amps

Temperature Range: ambient +5°C to maximum 40°C

### **Contents:**

Lovibond® DI 10 Incubator

External 12V Universal Power Supply

Set of Leads (UK, EURO and USA)

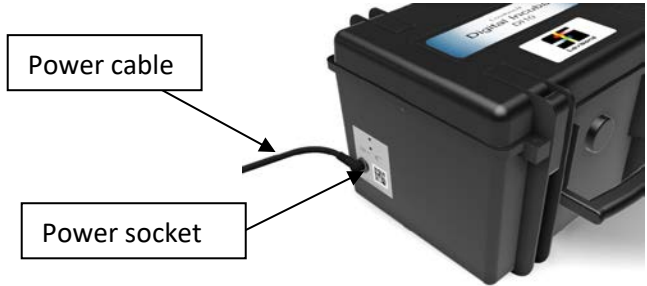
In-car Power Adapter (cigarette lighter to 12v input)

### **Optional Accessories:**

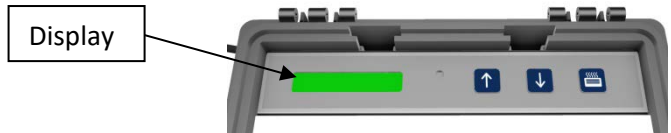
56B000801      Dipslide Holder

**Switch On:**

To turn the Incubator on, insert the power cable to the power socket on the side of the instrument



When powering on the Lovibond® DI 10, the LCD display will show.



L O V I B O N D D I 1 0

w w w . l o v i b o n d . c o m

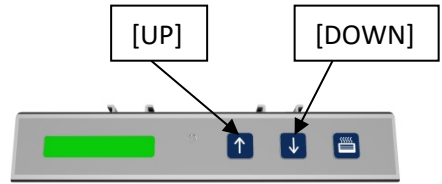
S N : 1 0 2 4 V 1 . 0

Then the screen will show the current temperature setting:

T e m p : 3 0 ° C

Move between screens by pressing [UP] and [DOWN] keys to show

ELAPSED TIME:



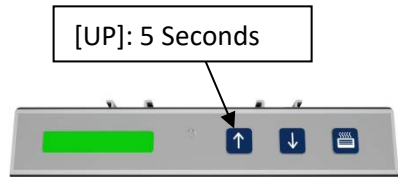
E l a p s e d : 0 0 0 : 1 7

TARGET TEMPERATURE:

T a r g e t T e m p : 3 5 ° C

**Target Temperature:**

To change the Target Temperature, press [UP] for 5 seconds then release the key, the screen will change to:

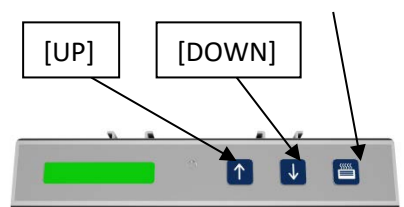


T a [HEAT] t T e m p : 3 5

[HEAT]  
to set

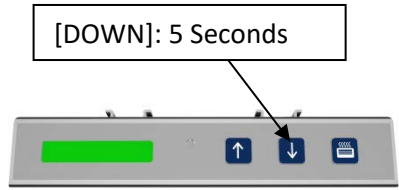
[UP]

Press the [UP] and [DOWN] arrow keys to change the value. The maximum value is 40°C. Press the [HEAT] key to enter the value. This value will be stored in the flash memory and be the default value when the instrument is switched on.

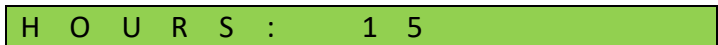
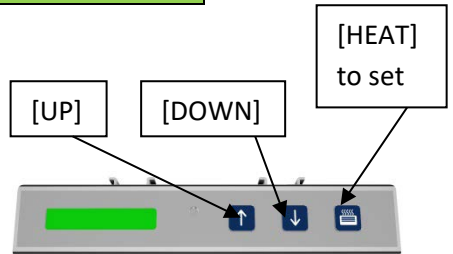


**Incubation Time:**

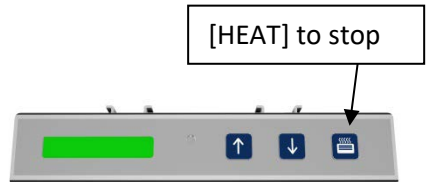
To set the Incubation Time, press [DOWN] for 5 seconds then release the key, the screen will change to:



Press the [UP] and [DOWN] arrow keys to change the value. Press the [HEAT] key to enter the value. The screen will then change to:

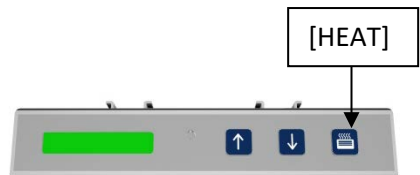


This value will be stored in the flash memory and be the default value when the instrument is switched on. If this time is set to 0, then heating will continue until the [HEAT] key is pressed.

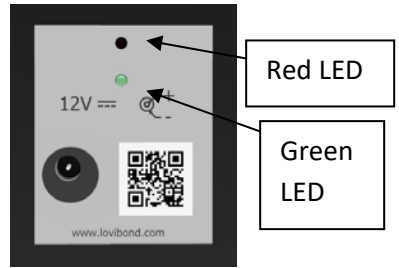


**Starting the Heaters:**

Press the [HEAT] key to switch on the heaters and circulating fans.



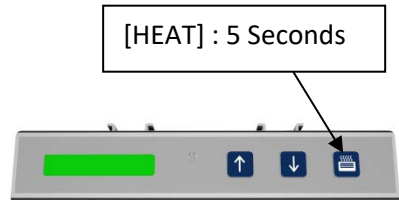
On the side of the instrument, the RED LED will show that the heaters are activated. When the target temperature has been reached, the GREEN LED will come on and the RED LED will switch off. These lights will come on and off to reflect the instrument's heating functions to keep the unit at the required temperature. If both lights stay on, this indicates an ERROR condition and a message will be shown on the display.



If both lights are on and there is no ERROR message on the screen, the unit will be at temperature and only small, fast pulses of heat are required. In this condition, the lights will be switching on and off very fast and may give the impression that they are on all the time.

### **Setting the Elapsed Time:**

Once the unit has reached the required temperature, press the [HEAT] key for 5 seconds and release to set the elapsed time to 0.



### **Power Down:**

If the incubation time has been set, then the instrument will power down automatically once this time has elapsed.



## Error Warnings:

If there is a power failure while the unit is heating, then an error

P O W E R F A I L U R E

will be shown when the instrument reboots. Press any key to remove this message.

If for any reason the instrument resets itself, all heating will be stopped and an error message

E R R O R R E S E T

will be shown for 3 seconds.

If a key is held down too long or there is a problem with the keypad the following message will appear.

K E Y P A D E R R O R

Or

K P C = 1 0 0 0 1

Switch the instrument off and then back on. If the message appears before any key is pressed, then the keypad should be replaced

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