
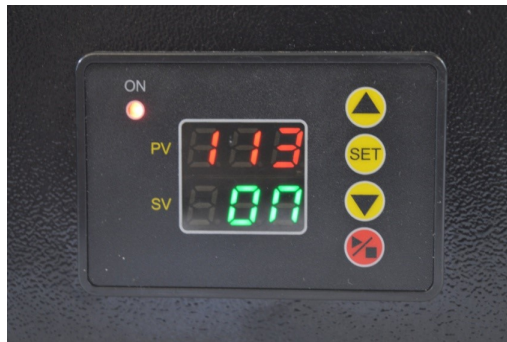



## LV204 UV EXPOSURE UNIT




### Instructions on Use

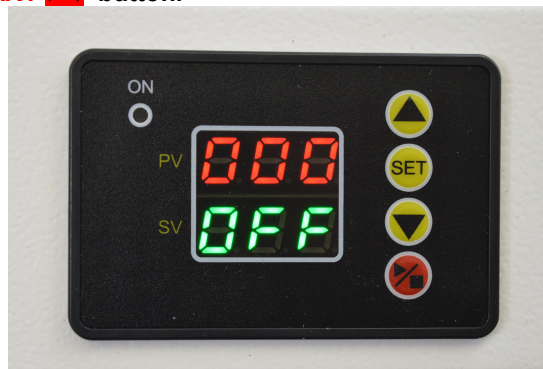
1. Remove unit and power cable from the packaging and place on a flat surface in a location where the lid can be fully raised and lowered without obstruction.
2. Read the electrical safety notice on reverse (or attached). Check the rocker switch is in the OFF position then on the IEC, insert the IEC power lead into the unit and plug the supplied plug into a suitable socket.
3. **Ensure the lid of the exposure unit is closed**, before switching the unit on using the rocker switch on the IEC mains inlet socket, the unit will now automatically run through a start-up sequence. The tubes will illuminate and the countdown timer will count down from the pre-set time down to zero to pre-heat the UV tubes ready for use giving consistent exposure times.
4. Next raise the lid of the UV exposure unit and place the artwork emulsion face up in the centre of the glass.
5. Place the material to be exposed, UV sensitive side “down” on top of the artwork. Carefully close the lid ensuring both catches are engaged.
6. To start exposure press and hold the **RED STOP/START**  button on the timer for 1-2 seconds and the exposure will commence, the red LED above the display will illuminate indicating the UV tubes are on.

**NB : The UV exposure unit timer modules are factory set to an exposure duration of 150 seconds. If this exposure time needs to be changed please follow the procedure in the section “PROGRAMMING THE COUNTDOWN TIMER”**



8. Once the timer has counted down to zero the UV tubes will be automatically switched off, and the display will display **OFF**. It is now safe to lift the “exposure top” and undo the catches of the clamp down frame to access the exposed work piece and remove the exposed part and artwork, the unit is then ready for the next part to be exposed. **RED STOP/START** 

**NB : The exposure can be paused or stopped at any time when the timer is running by pressing the **RED STOP/START**  button twice and can be restarted again by pressing the **RED STOP/START**  button twice. To restart the timer while the timer is running press and hold the **RED STOP/START**  button.**



## Programming the Countdown Timer



To set the exposure time with the display showing **000/OFF** press the **“SET”** button twice in quick succession, the **RED** digits will then flash, and the digits on the display can be set to your required exposure time, for example **075** seconds by using the **“UP”**▲ and **“DOWN”**▼ arrow keys. When you have set the correct time, press the **SET** button twice, and timer will run through the “Pre Warm up” start up sequence.

To then expose your work press and hold the **RED STOP/START** ▶/■, the counter will then turn on the UV exposure tubes, and then count down from the preset exposure time, the red LED will show the unit is on and the red numerical display shows the remaining time, as the timer counts down to 000, the green display below shows **ON** while counting down. This then changes to **OFF** when the cycle is completed.

To expose a second item press and hold the **RED STOP/START** ▶/■ button, and the cycle will then commence again. Even if the exposure unit is switched off all of the settings will be remembered and saved for next time the unit is used.

### Trouble Shooting

The exposure unit timer is a universal timer module, in the event of the program inside the timer being accidentally corrupted, or altered all the internal settings can be re-set by following the procedure below.


In setting mode, the **RED** digital LED displays the **Program code**, and the **GREEN** digital LED displays the **code parameter value**; To enter “Setting mode” press the **SET** key for approx 1-2 seconds until the display changes and by default it should show red **P0=0**.

There are three program codes (**P0, P1, P2**) to change the code to the required parameters, press the **“UP”**▲ and **“DOWN”**▼ arrows to see the settings, as these may need modifying for the timer unit to work correctly.

The settings should be set to **P0=0 P1=0 P2=1**

In setting mode (Adjust if necessary the program code values by pressing the **SET** button **three** times until the lower **GREEN** digit flashes use the **“UP”**▲ and **“DOWN”**▼ arrows to adjust to the correct required settings, then press and hold the **SET** button for the system to accept the set information. After a few seconds the timer will then automatically run through the pre warm up start up sequence.

## Hints

1. The UV tubes will produce as much as 30% more UV light when they are warm. For consistent Exposures turn the machine on, with the lid closed, for a 150 Seconds exposure prior to use.
2. Exposure times vary depending on material to be exposed. As a guide Fortex Microtrak printed Circuit board material will take approximately 120-240 seconds to expose with a good quality artwork.
3.  **CAUTION Avoid operating the unit with the lid raised, exposure to UV light can be harmful**

## Spares and Servicing

Please contact our spares department stating the Model Number LV204 and serial number which can be found on the rating label next to the mains power input.

Spares are available and are only supplied on the understanding that the replacement of such parts requiring the exposure of potentially live electrical parts will be under taken by an electrically qualified person. The following are common spare parts that can be ordered:-

1. UV ACTINIC 350-400nm (UV-A) Fluorescent tube 15W 457mm (18") Lamps will lose intensity, of approximately 15% every 1000 hours. These should be replaced as soon as exposure time start to significantly increase. Order Code UV-15WATT
2. Fluorescent electronic ballast Order Code UV-BALL
3. Digital Timer Order Code UV-DIGT

## Associated Products

A range of products are available for use in conjunction with the UV exposure unit on the Fortex web site

[www.fortex.co.uk](http://www.fortex.co.uk)

Including:-

Microtrak Presensitised board  
Photopolymer Dry Film  
Laser Artwork Film  
Inkjet Artwork Film  
Developing Solutions for UV sensitized Products



## Electrical Safety Notice

### CONNECTIONS TO MAINS ELECTRICAL SUPPLY

This equipment is designed to safety class 1 before connecting this equipment to the mains electricity supply; examine the information on the apparatus rating label. Ensure that the mains supply is single phase alternating current (a.c.) of the stated frequency (Hz), with neutral nominally at earth potential. Check the supply voltage is within the stated range. The equipment rating label states the value of the fuse fitted to the apparatus itself.

Ensure that the plug or supply circuit is fitted with an appropriate fuse of higher value.

### **WARNING THIS APPARATUS MUST BE EARTHED.**

The wires in the mains lead are coloured in accordance with the following code:

Green/Yellow - Earth (E)

Blue - Neutral (N)

Brown - Live (L)

If a moulded fused plug is not fitted connect the wires to a non-reversible 3 pin plug as follows:-

**Green/Yellow** wire to terminal marked: E (earth) or G (ground) or coloured Green or coloured Green/Yellow.

**Blue** wire to terminal marked: N (neutral) or Common or coloured blue.

**Brown** wire to terminal marked: L (live) or Phase or coloured Brown.

### **NO SERVICING OR MAINTENANCE SHOULD BE CARRIED OUT UNTIL THE UNIT HAS BEEN SWITCHED OFF AND ISOLATED FROM THE MAINS ELECTRICITY SUPPLY.**

Any spare parts which may be required are supplied on the understanding that the replacement of these requiring the exposure of live electrical connections will be undertaken by an electrically qualified person.

### **DISCONNECT THE MAINS PLUG FROM THE SUPPLY SOCKET WHEN NOT IN USE**