

# KINSTEN

## EXPOSURE UNIT KVB-30

### INSTRUCTIONS

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## ASSEMBLY INSTRUCTIONS:

Power cable is located in top of exposure box, to release pull small brass knob. (fig.1-1)

## OPERATION INSTRUCTIONS:

1. Turn off all switches on the front panel (fig.1-2) and adjust the exposure time as:

KVB - 30A: Turn the small adjustable knob and an arrow on the knob point to a required seconds.

KVB - 30D: Push + or - to increase or decrease the presetting number.

Common exposure time are 60-90 seconds for photographic film and 70-120 seconds for hand made lay-outs. (only available for KINSTEN presensitized circuit board, other brands of board should be longer).

2. Unlock the vacuum clamp by pushing the metal latches outward with your thumbs, and lift clamp. (fig.3)
3. Place the presensitized PCB on the vacuum clamp close to the entrance of air pipe with a distance of 1-3cm (see fig.2), then put artwork on top. If exposing double sided PCB's, attach two layers of artwork together and tapeing the edges after perfect alignment. Then insert the board between the artworks.
4. Close the vacuum clamp pushing the frame of clamp down until fully locked.
5. Start vacuum pump and wait for approximately 30 seconds until the air under vacuum clamp has been fully removed.
6. Close box and turn on UV light source, upper/lower or both as required.

KVB - 30A: LED bar graph shows the exposure progress. The exposure is complete when all red LED are extinguished and the yellow LED is illuminated.

KVB - 30D: Display pannel indicates the counting of exposing seconds and at the end of exposing time, a buzzer will give a 2-3 seconds signal. Adjust the preset second during exposure may cause the interruption of the timer.

7. Turn off vacuum pump, open the box and wait a few seconds then unlock the vacuum clamp and open it slowly.
8. If you wish to expose multiple PCB's the RE-EXPOSE function will help speed up the operation. Turn off all switchs and close the cover of box after use.

CAUTION: 1. Avoid exposure at a short distance for more than 5 seconds. If necessary, sunglasses are suggested.

2. Unplug the power cable before replace the fuse, 3 Amp for 100-120V, 2 Amp for 220-240V.

3. Do not use solvents on transparent plastic surface, use soft cloth with water/detergent or 50% water/alcohol.

4. To achieve the best results when using hand made lay-out, arrange your lay-out and the board as fig.4.

5. Normal artificial room light will not harm sensitive surface if exposed less than 5 minutes.

6. Breaks and flaws in artwork may be touched up with a black text pen.

## SPECIFICATION:

Voltage	* 100,110,220,240
Frequency	50,60 Hz
Input	200w
Light Source	Chemical Lamp 15w x 6
Mask Area	22 x 37 cm
Dimension	51 x 41 x 15 cm
Weight	12 kgs

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Fig. 1-1

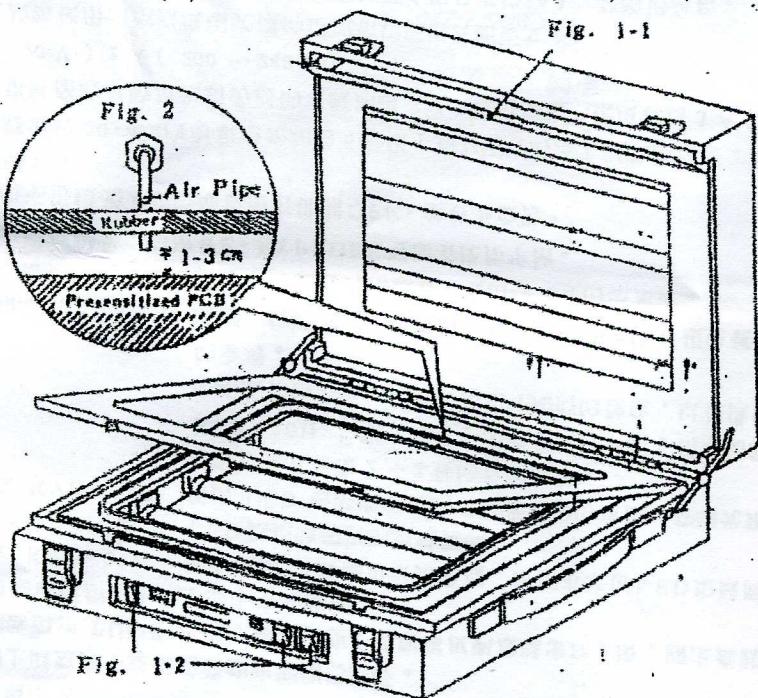


Fig. 1-2

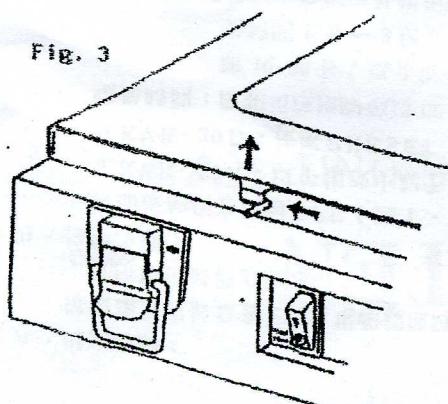
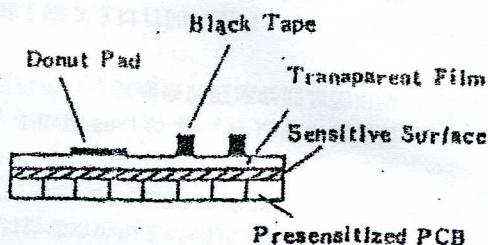


Fig. 3



### A、組立說明：

電源線放置於盒蓋上方之電源線收置室內（圖 1 - 1），拔開金色環鉤即可取出，插座則位於機盒後方。

### B、操作說明：

1. 將面板的所有開關 OFF ( 圖 1 - 2 )並調整適當的曝光時間其方法如下：

a. KVB - 30 A : 以手指或小起子，調將 TIME SELECT 的旋鈕。

b. KVB - 30 D : 按壓 PRESET SECOND 秒數設定開關之 + 或 - 。

曝光時間：黑相機及相機為 60~90 秒，手貼箱 70~120 秒，半透明相機請增加 10~30 秒（以金電子感光板為準），其他廠牌因感度低請稍增曝光時間 1.5 ~ 3 倍。

2. 將真空夾板手以大拇指向外側板並往上翻（圖 3）以打開真空夾。

3. 將感光板置於真空夾之玻璃上並與吸氣口保持 1 ~ 3 公分的距離（圖 2），感光板上再適當的放置紙稿。

如為雙面板，請將兩張紙稿對正後將左右兩邊緣用膠帶貼住，再將感光板插入原槽中。

4. 關上真空夾，並確認真空夾開關已鎖好。

5. 關啓真空 PUMP 電源，待抽真空（透明膠皮與玻璃密合）後，關上盒蓋並打開光源依所需上、下或上下時間。

A. KVB - 30 A 係由紅色 LED 顯示曝光進程，當所有紅色 LED 熄滅而黃色 LED 點亮時即表示曝光完成。

B. KVB - 30 D 係由 LED 數字顯示器顯示曝光進行的秒數，當曝光完成時計秒停止並發出 2 ~ 3 秒的聲音提示。

KVB - 30 D 於曝光進行中調整初設秒數時，極易造成曝光中斷並發出警音，此時可依視中斷時的秒數，以提供再曝光的參考。

6. 關掉真空 PUMP 電源，打開盒蓋，等待幾秒鐘後將真空夾往外板並輕輕往上推，當真空塞器解鎖後，即可輕易打開盒蓋，取出曝光好的感光板。

7. 面板拭曝光，切按 RE - EXPOSURE 可繼續操作手續。

如不再曝光，請將面板所有開關 OFF，並蓋上盒蓋。

### 注意事項：

1. 避免於 30 秒以內直視燈光超過 5 秒鐘，如有需要請戴太陽眼鏡保護。

2. 更換保險絲時請先將旁邊的電源插頭拔掉“以免觸電”保險絲為 3 A ( 100 ~ 120 V ) 2 A ( 200 ~ 240 V ) 。

3. 請勿使用溶劑擦拭感光機的透明塑膠面以及面板文字。

4. 本機光源長時間使用後會逐漸減弱（與日光燈同），請酌增秒數。

5. 製作手貼紙請以正向（圖 4）方式貼稿，以便得較佳的曝光結果，但電要拍圖、COPY，或照相底片則以反向（繪圖面與感光板面接觸）為佳。

6. 斷級，透光現過光不良的原稿請先以簽字筆修正。