



# Apollo II Liquid Viewer

## INSTRUCTION MANUAL



# OPERATING INSTRUCTIONS

## Apollo II Liquid Viewer





Thank you for buying this Adelphi Apollo II, which should provide many years of good service. This manual contains important information about the safe operation of the machine, and should be read and understood completely before using the machine for the first time.



## SAFETY

**ALWAYS** ISOLATE THE ELECTRICAL SUPPLY BEFORE FITTING, REPLACING BULBS OR UNDERTAKING ANY MAINTENANCE.

**NEVER** SPRAY LIQUID ONTO THE LIGHT BOX.

The information in this manual is provided in good faith, and is accurate to the best of our knowledge and belief. However, we reserve the right to update and amend this information as may be required, and do not accept any liability for inaccuracy or omissions.



## APOLLO II LIQUID VIEWER

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## 1. SETTING UP

Carefully unpack the components from the box. The unit is supplied fully assembled and carefully packed in foam for transport.



Hinge open the unit till the back plate is straight. Engage the latch block at the back of the unit by sliding it right using the handle. This will secure the unit in place. Check the unit is engaged properly by trying to hinge close, if there is resistance in closing, the unit is safe to work. If there is a problem, try to engage the latch by adjusting the back frame front or back and then sliding the latch block in place. View from the back is shown below.





The light unit can be adjusted to various positions as required by loosening the thumb knobs and rotating the both the arms and then locking it on both the sides once the desired position is achieved. Once the arms are locked the light box's angle can be adjusted by rotating the box to achieve the required position.

Connect the electrical cable to the electrical box at the back and switch on the unit by activating the switch on the side of the unit.

## 2. OPERATION

The Apollo II Liquid Viewer gives a controlled lighting level under which liquids can be observed for visible particles against a matt black and non-glare white background. The Apollo II meets the requirements in EP 2.9.20.

The light level can be adjusted by moving the light box up or down. This can be carried out by loosening of the two thumb knobs on the arm of the light unit.

## 3. CLEANING AND MAINTENANCE

Ensure the unit the switched off and electrical connections disconnected.

Mild water based detergents may be used to clean the painted surfaces and wipe off the liquid gently with special care on the Matt Black surface as this can be damaged easily.

IPA may be sprayed onto the Matt Black & White inspection surface to disinfect but it should not be rubbed as it could damage the surface. Let the IPA dry out on its own.

Care must be taken to ensure no water or IPA goes near the lamp housing or electrical connections at the back.

Ensure all spillages are cleaned up immediately.

The bulb life is approximately 50,000 hours or 20 years.

### Annually

Check the condition of paint work and replace or repaint as required in case of any damage to the working surface. Replace any bulbs that are not working.

Perform a light check as per Section 5 or check bulbs and replace if necessary.

Perform Electrical test such as Insulation and Earth Bond Test as per local legislation.



#### 4. SPARE PARTS

Part No	Description
6031535	Replacement bulbs (2 off required per viewer)
6031555	Split Screen (Black and White Inspection Panel)
6031571	Diffuser

Please contact the Aftersales team for any further spares or advice.

Telephone +44 (0) 1444 472300  
Email [sales@adelphi.uk.com](mailto:sales@adelphi.uk.com)

#### 5. LIGHT MEASUREMENT CHECK

To perform consistent checks the ambient light of the room of use should be consistent. If you check the light level of the unit in a dark room with ambient light below 200Lux there will be very little influence on the reading from the ambient light. If the Ambient Light in the Room is 1500 Lux this will increase the measured light of the Apollo 2. Check your light meter is suitable for LED Lights as not all lightmeters are suitable for LED Light measurement.

You should check the light level on the Apollo 2 LED unit where the unit is being operated under normal room light conditions. If you have very high light level in the room and the maximum 3750 Lux is exceeded when the Light Box is fully raised it may be necessary to add a 2<sup>nd</sup> Diffuser to reduce the light to compensate for the high room light.

Place the Light meter in the center of the base under the lamp  
Measure and record the room light with the Apollo 2 LED switched off and record for reference

Switch on the bulbs and check both illuminate and leave for 10 minutes to achieve the normal light level.

Check the background and base white areas have not become dirty and the diffuser appears clean.

Record the light a light meter on the base and with the lamp set uppermost and pointing vertically down, check the light level is above 2000 Lux.

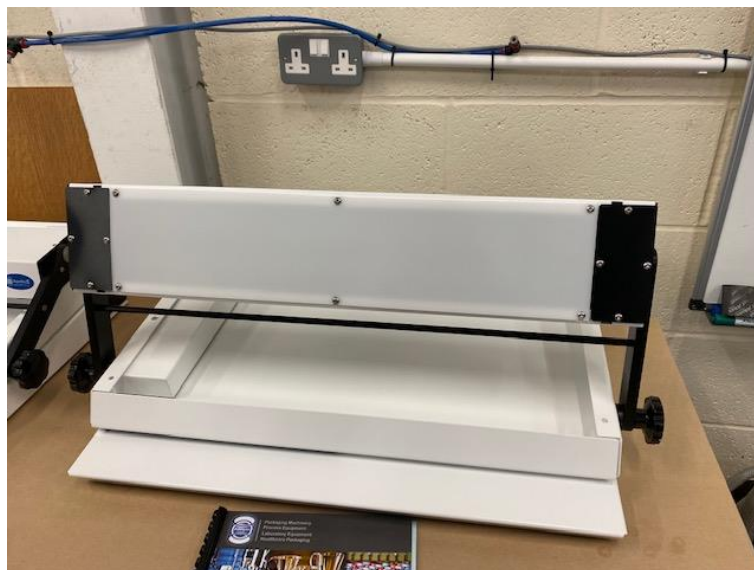
Lower the light box and check the light level increases as the box is lowered. You will find that the Maximum 3750 Lux will be exceeded when the light box is very low. There will be a noticeable lower light level measured in front of the black panel due to the reduced reflection from the black surface.





## Notes

1. The Light meter may take 30 seconds to achieve a steady reading.
2. Light meter pictured is an Isotech LT40.
3. If the light level is too low, then check the following:
  - A. Both bulbs are fully illuminated
  - B. The diffuser is clean and dust free.
  - C. The plastic cover over the bulbs are clean.
  - D. The white background is not discoloured.Light is reflected from the white surface.
4. To remove the diffuser please fold the lamp unit in the position as shown in the photo below.





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Use 2.5 size Allen key to remove the 6 off M4 button fixings holding the diffuser. Keep the diffuser and the fixings safely away for future use.

5. If the Apollo II is being used in a room with a high level of background light then the light readings may rise above the 3750 Lux maximum. To reduce the light to an acceptable level an additional diffuser may be fitted to the unit.