



GUIDE TO USING THE CARDIFF ASTRONOMICAL SOCIETY'S OBSERVATORY AT DYFFRYN GARDENS

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OPENING AND CLOSING THE OBSERVATORY ROOF

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Introduction

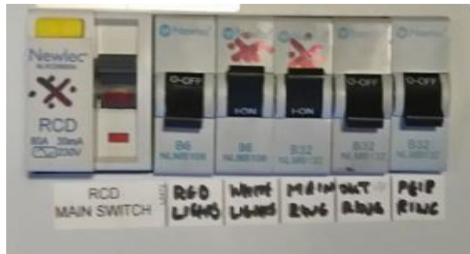
1. Use of the Observatory is restricted to paid-up members of the Cardiff Astronomical Society (CAS). The Observatory is situated in the grounds of the National Trust's Dyffryn Gardens (St Nicholas, Vale of Glamorgan, CF5 6SU).
2. Smoking (including vaping) in or close to the Observatory is forbidden, as is the consumption of alcohol. Any serious misconduct could lead to the termination of membership of the Society in accordance with the CAS Constitution.

Opening the Observatory roof

3. **It is essential that the procedures set out here are followed, as a failure to do so may impact on the Society's insurance policies.**
4. After opening the Observatory door, the internal lights should be switched on. (A torch fitted with a red light will facilitate this when it is dark).
5. New visitors should familiarise themselves with the interior of the Observatory before accessing the main (Celestron 11") telescope.
6. The dust cover to the telescope can then be removed in order to check the position of the telescope. On the side of the telescope's fork arm, there are two rectangular marks which should be lined up. These will indicate that the telescope is in the correct position for both the telescope and roof not to be damaged when the roof is opened.



7. The protective lagging on the motor track can now be removed and attention paid to the electrical junction box which contains several dedicated miniature circuit breakers (MCBs).
8. To turn on the electrical power in the Observatory, switch on (i.e. push up) the three unmarked MCBs and then switch on the 13-amp power socket next to the roof. **Note that the three MCBs marked with an "X" must never be turned off (i.e. pushed down).**



9. The **red** emergency stop should now be released by turning it clockwise and a check made that there are no items that will affect the opening of the roof. Any other visitors present in the Observatory should now be advised that the roof is about to be opened.



10. The roof is opened using the control buttons which are marked as follows: O (bottom button) = Open; S (centre button) = Stop; C (top button) = Close. Thus, pressing the Open button will open the roof. **N.B. The roof motor can be stopped immediately by pressing the **RED** Emergency Stop button.**



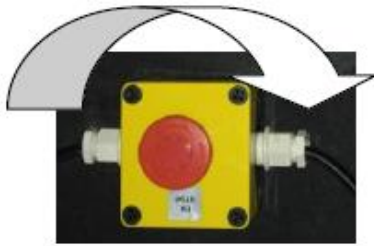
11. When the roof is completely open, the 13-amp power socket should be switched off and the previously removed protective lagging should be used - together with the retaining clips - to cover the roof runner in the ceiling above the outside decking.



12. When the Observatory is being used at night, the power pack for a set of external LED lights should be plugged into the main socket on the outside wall to the right of the main Observatory door and then connected to the jack plug in the ceiling. (The power pack is located on a shelf behind the Observatory door). The controller for these lights is situated on the right of the Observatory desk.

Closing the Observatory roof

13. Before closing the roof, the retaining clips and protective lagging should be removed and, if being used, the LED lights should be unplugged (and the LED power pack returned to the shelf behind the door).
14. The **red** emergency stop should then be released by turning it clockwise and the 13-amp socket should be switched on.

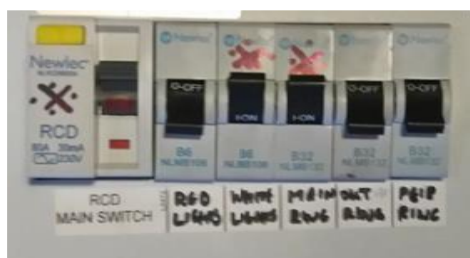


15. Other people present in the Observatory should now be advised that the roof is about to be closed, but no attempt should be made to close the roof unless a check has been made to ensure there are no obstructions, e.g. the telescope (which should be parked in the same position as before the roof was opened).



16. Next, ensure that:

- the emergency stop button is pushed in
- the roof socket is switched off
- the outside roof flap opposite to the door has been closed, and
- the three MCBs in the junction box have been switched off (i.e. turned down)
- **as stressed above, the three switches marked with an "X" must never be switched off.**



17. The protective lagging should now be put in place over the roof runner in the ceiling using the retaining clips.

[This document was last edited by Peter Crabb on behalf of the Cardiff Astronomical Society on 7th July 2019]