EQ8 Mount Controller Board Replacement

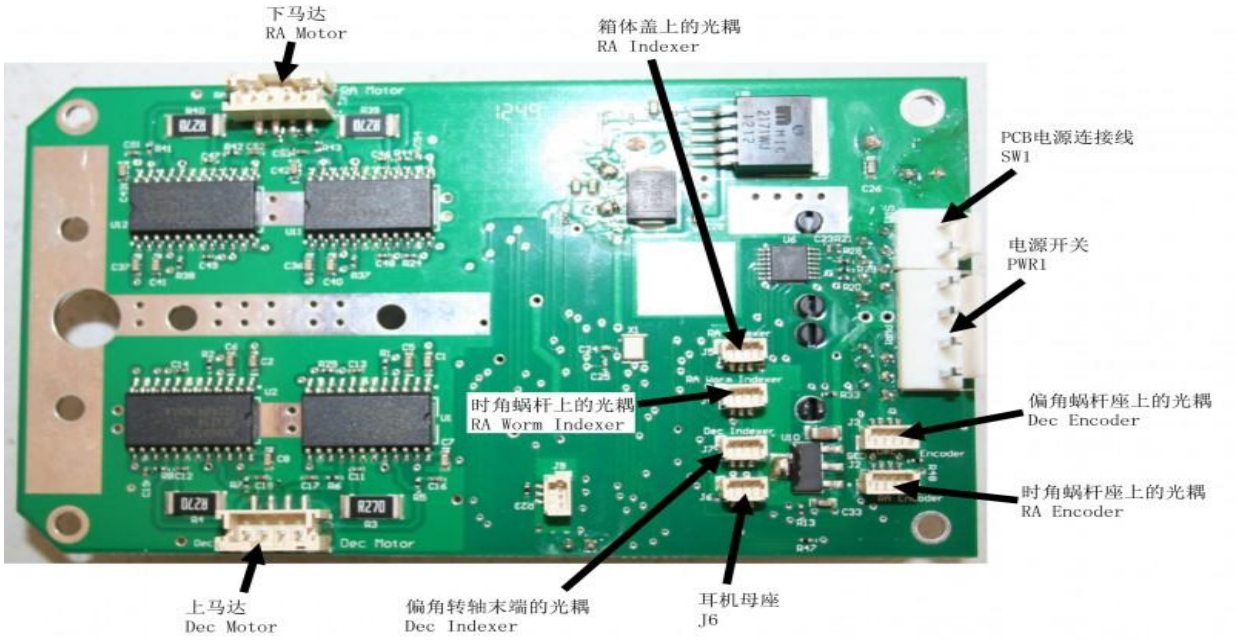
In the event that you have accidentally fried your EQ8 motherboard, here is an updated version of a document originally published on the Skywatcher EQ8 Yahoo group – my thanks to the author for providing the original which helped me to get my EQ8 fixed

My board arrived nicely packed in bubble wrap

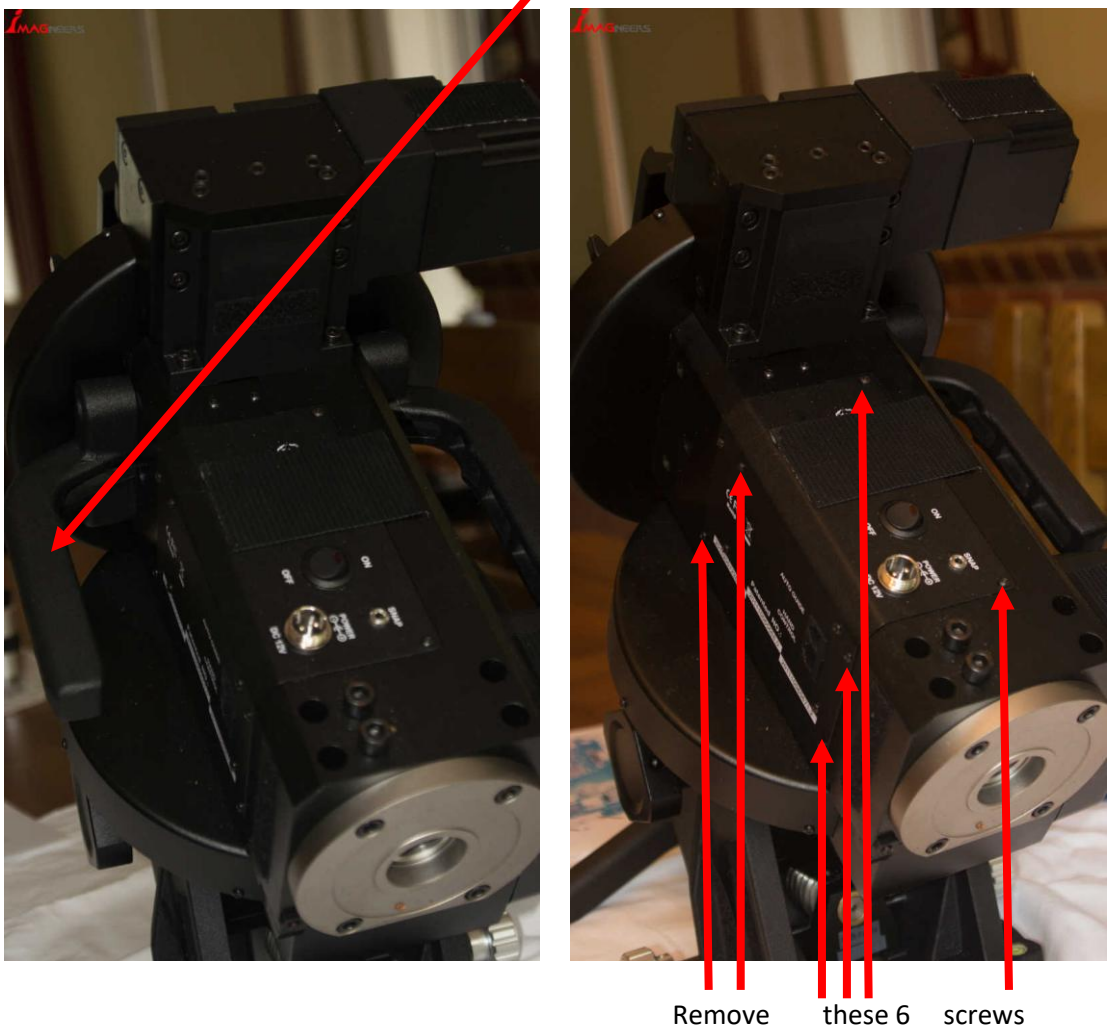
Once out of its packaging, you can see that it is a double sided board:-

The first of the pics shows the side that is ‘up’ inside the mount, the second pic shows the ‘down’ side which has the connectors for power, autoguider, hand control and SNAP – these just slot into cut-outs in the mount.

We are more concerned with the ‘up’ side with all its connectors etc. This pic shows what they all do:-



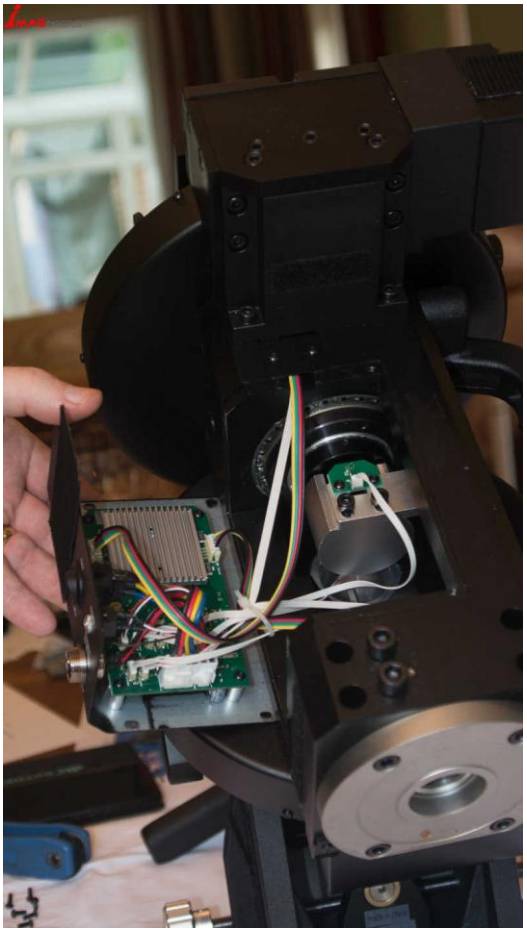
1. I found it much easier to remove the carrying handle in order to access the screws to remove the cover – using a 6mm hex key:-

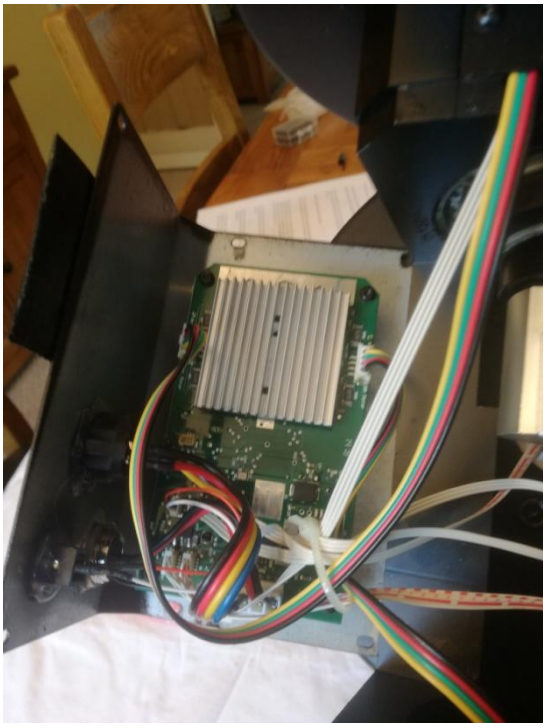


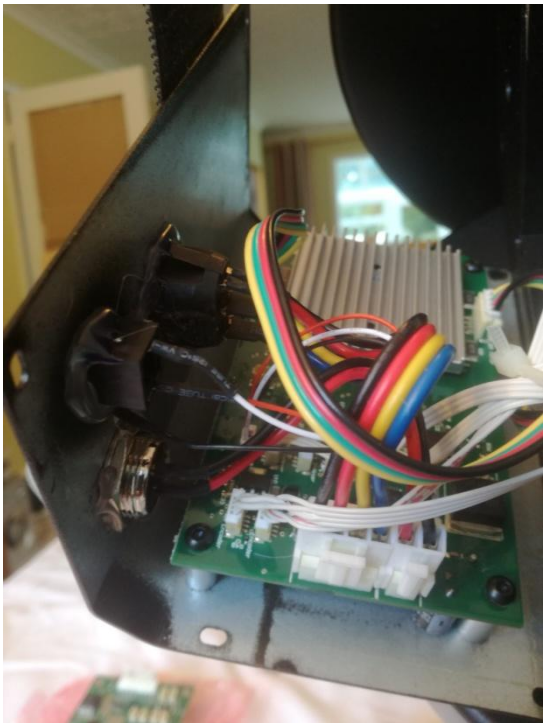
2. Remove 6 Outer Screws and remove casing (only those screws on casing perimeter) – using a 2mm hex key

3.Carefully note position of CB (Controller Board). CB is attached with heatsink near the Skywatcher Logo Skywatcher - not with heatsink nearest dec bar shaft.

NOTE – you will have to remove the heatsink and attach it to the new board







4.Take your time and observe location of each of the 11 connector points paying particular attention to

individual color coded location/positions of the wire bundles and markings on the ribbon cables.

5. Use the picture above and mark each of the connector points with a number 1 – 11.

On my system the connectors can only fit in one way, so there is no need to work out which way they fit – check this is the case with yours and if not:-

On each block describe its connector. If a wire bundle, use YGRB to eg describe a wire bundle with Yellow, Green, Red, Black wires with Yellow on left side and decide what left means. Left could mean heatsink side of CB or side furthest away from weight shaft. Similarly in each box for ribbon cables describe using the code used by the ribbon cables noting which symbol points left. 'Left' in this case means pointing towards heatsink side of CB.

Double check your work.

6. Make 11 pieces of numbered tape (I used masking tape) labeling each piece with a number 1-11

- With tweezers and/or flat head screwdriver and some care remove the connectors one by one.
- Some patience required with 4 thin ribbon cables that are grouped on CB beside one another towards centre of CB. I found it helpful to have the CB unscrewed (8) and to be able to place forefinger and thumb of left hand alongside base of these connectors allowing right hand to use a thin flathead to lift the thin white male connectors one by one from their female board connectors. Note these connectors come off easily connected with thin white plastic lips attached to their grey plastic connector points on the board.
- Alternatively, use a chip puller – I had mine from an old electronic repair kit

Carefully attach each piece of tape with its individual number to the relevant cable on the board as you remove the cable from the board

7. Unscrew and set aside the screws for the heatsink and detach heatsink from board setting aside to reattach to new CB. Choose containers to hold different size screws and label/describe the containers. Or choose another method to label/describe screws and locations.

8. Remove heatsink from CB attach heatsink to new CB using a 2mm hex key.

9. With CB carefully positioned but not connected to its base replace connectors in reverse order.

10. . Screw CB to its base.

11. Refit the assembly back on to the mount and test