

## Instructions to remove the IR filter from a VX 2000 web cam.

Beware this is not the easiest webcam to work on, and you run a very high risk of ruining the CCD chip. If you have one spare and you want to try it anyway read on.....

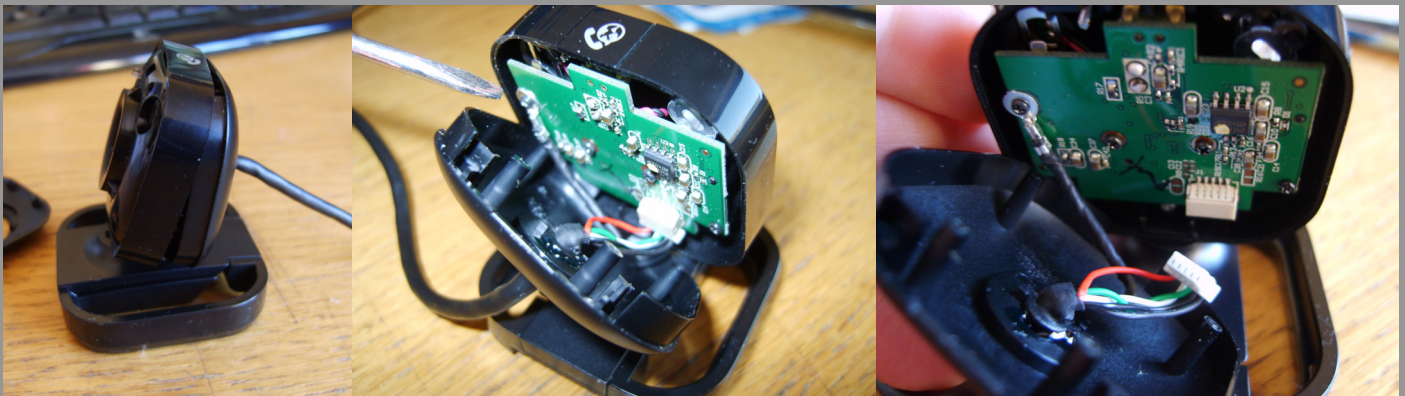
### Requisition order -

- One VX 2000 webcam
- A tiny phillips (a flathead will work) screw driver - NON MAGNETIC.  
(if you dont have a screw driver small enough, a filed down cork board pin will work too.
- A tiny knife or jewlers file, or needle.
- A steady hand!



1. Take your 2000 and remove front fascia by placing a knife or thin screwdriver in the gap next to the button on the top. Apply a little pressure to pull the front fascia off, and work your screwdriver round the fascia.

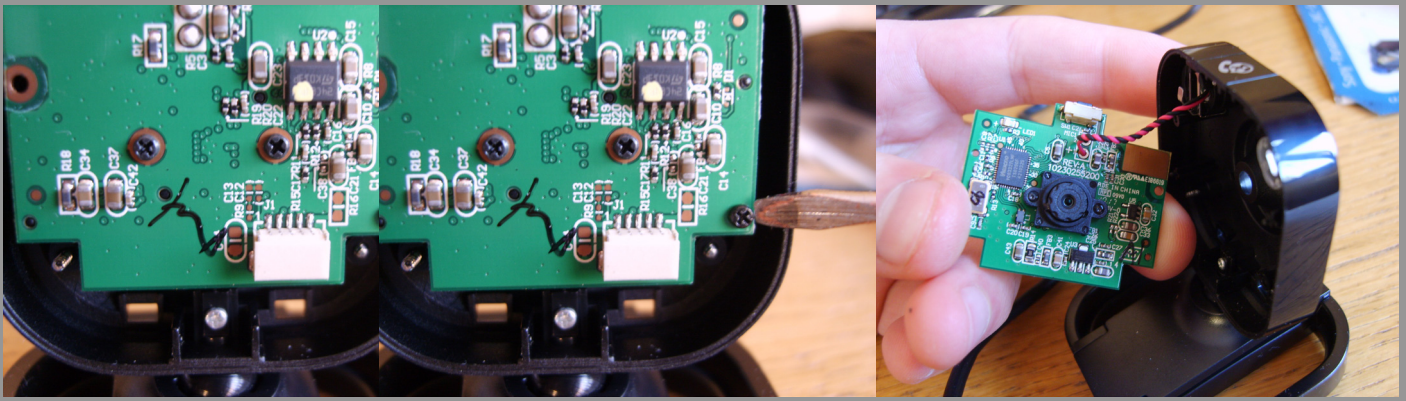
2. Now unscrew the 4 screws on the front of the 2000.



3. Once unscrewed you can prise the back off the camera with your screwdriver. The back is connect to the main board by cables to don't pull too hard, just loosen the back cover gently.

4. Using your screwdriver and carefully prise the plastic connector out of its housing. Work each side a bit at a time and it will slide out.

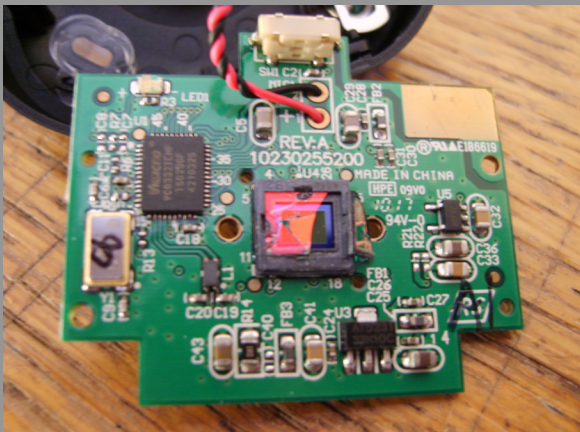
5. Unscrew the remaining cable carefully.



6. Loosen the two screws in the middle of the board. I made the mistake of taking the board out of the case first, and it made it difficult to unscrew these two middle screws and they are very tight. It's best to loosen them with the board still held in the casing.

7. Unscrew the last screw to remove the board from the casing.

8. Note the lens and black gantry, remove the screws you loosened earlier and carefully remove the lens gantry.



9. The CCD chip is revealed and that red tinted glass cover you see is the IR filter. There are four inlets in the plastic surround; you can insert a very thin knife or jewellers file into these, and careful work the glass plate off. I unfortunately cracked mine and the glass splinters scared the CCD chip ruining the camera. Be very careful!

10. Use a floppy disk or piece of negative film to block out the visible light and reassemble the camera (you block out visible light so the camera can be used with IR LEDs which will make the tracker much more accurate due to a lack of other light sources other than your headset).

I would not recommend gluing the film inside the camera as you may damage the CCD chip, which is sensitive to dust and other tiny particles, so reattach the lens gantry as soon as possible and glue your visible light blocker on the case of the camera, which will be easy to do while it's disassembled.

I hope that's helped you, and happy tracking.

Alex Massey