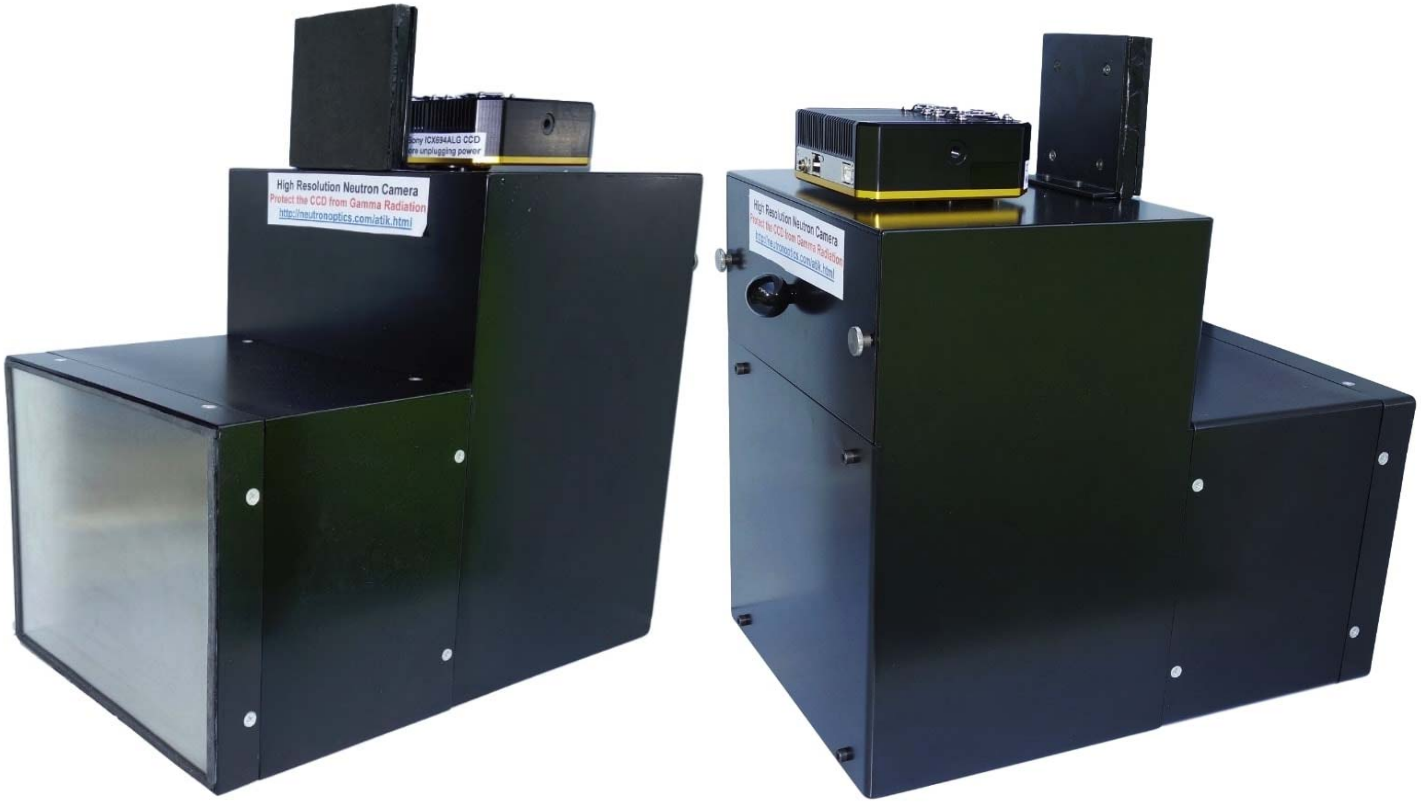

# Disassembly of the Fast HiRes Imaging Camera

The Fast HiRes Imaging camera consists of a main box containing the CCD bolted to the outside top protected by a B4C/Pb radiation shield, with the lens and mirror inside the box.. The back of the box has a trap for access to the lens, and also contains four M5 camera mounting bolts. The inter-changeable frame holding the scintillator is bolted to an intermediate section of variable length. The FOV can be reduced by removing this piece, with increases in intensity and optical resolution.

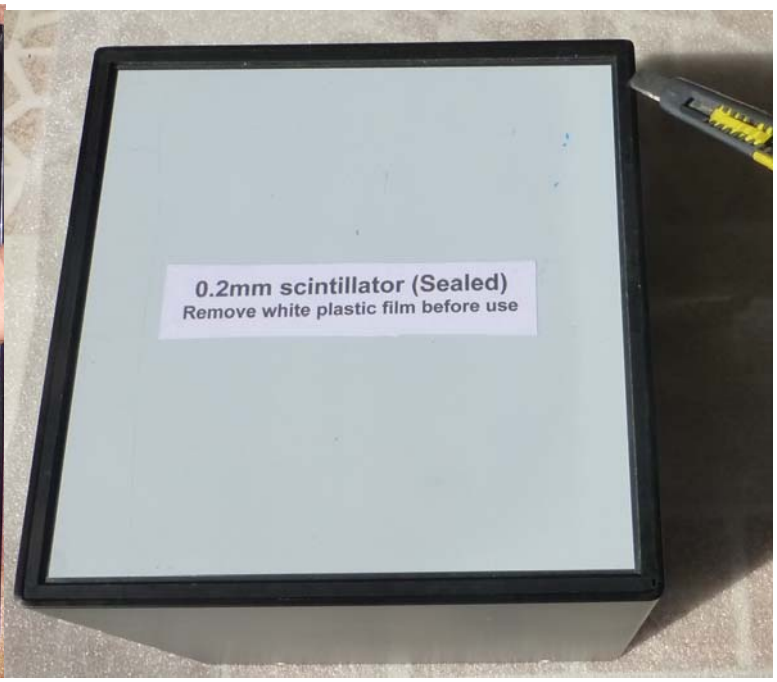



The CCD unit can be removed after first unscrewing the lens (left) to reveal three M3 bolts (right), which can then be unscrewed. There is no seal between the CCD unit and the box, and no adjustments, so the CCD unit can be easily replaced. **Do not touch the exposed surfaces of the CCD cover glass or lens**, the front of which is protected by a UV filter.

## Details of the Artemis VS60 CCD unit and Fujinon CF25HA-1 HiRes lens


The CCD unit has a GPIO (General Purpose Input-Output) socket that can be used to trigger an external sample table, but we recommend instead using the ArtemisCapture software to synchronise with an independent application (eg in Visual Basic) to control the sample table.

## Removal and Replacement of the Front Surfaced Mirror and Scintillator


The front surfaced mirror is protected by a thin plastic film, which must be removed before the camera is used. But first place the foot of the mirror against the B4C holder near the lens trap, then push the top of the mirror into the second B4C holder. The mirror can be further secured if necessary with glue spots or another B4C strip. To remove the mirror, press the thin B4C holder down along the top edge of the mirror, lifting it carefully until it is released. Wear gloves in case of glass breakage ! The scintillator can be removed by cutting around the edges of the B4C holder.

**Do not disassemble the Fast HiRes Imaging Camera CCD if it is not really necessary.**

**For the latest information, check [http://neutronoptics.com/VS60-disassembly.html](http://neutronoptics.com/VS60-disassembly.html)**